DOCUMENT RESUME

ED 193 601 CS 005 673

AUTHOR Gentile, Lance M.
TITLE Using Sports and Physical Education to Strengthen Reading Skills.
INSTITUTION International Reading Association, Newark, Del.
REPORT NO ISBN-0-87207-225-8
PUB DATE 80
NOTE 91p.: Reading Aids Series.
AVAILABLE FROM International Reading Association, 800 Barksdale Road, PO Box 8139, Newark, DE 19711 (Order No. 225, $3.50 member, $5.00 non-member, prepaid)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS *Athletics; Elementary Secondary Education; *Interdisciplinary Approach; Intermediate Grades; Middle Schools; *Physical Education; Reading Games; *Reading Instruction; *Reading Skills; Teaching Methods

ABSTRACT

Written primarily for coaches and physical education instructors, this booklet also may be used by reading teachers to diversify their programs and motivate students to read. The ideas and exercises presented are intended to combine the forces of intellectual and physical activity and have been developed through actual teaching. Chapters discuss (1) the nature of reading; (2) how reading fits sports and physical education; (3) reading activities for the sports and physical education curriculum; (4) evaluating grade levels of difficulty for reading materials; and (5) coaches and physical educators as models of literacy. Appended is a bibliography for sports and physical education with grade level reading difficulty. Books, magazines, paperback books, and other references are provided for baseball, basketball, football, gymnastics, tennis, track and field, volleyball, soccer, hockey, boxing, swimming, and horseback riding. (HOD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED193601

reading aids series

USING SPORTS AND PHYSICAL EDUCATION TO STRENGTHEN READING SKILLS

Lance M. Gentile
North Texas State University

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
International Reading Association Inc.
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

An IRA Service Bulletin
INTERNATIONAL READING ASSOCIATION
Newark, Delaware 19711

CS005673

INTERNATIONAL READING ASSOCIATION

OFFICERS
1980-1981

President Olive S. Niles, State Department of Education, Hartford, Connecticut

Vice President Kenneth S. Goodman, University of Arizona, Tucson, Arizona

Vice President-Elect Jack Cassidy, Millersville State College, Millersville, Pennsylvania

Executive Director Ralph C. Staiger, International Reading Association, Newark, Delaware

DIRECTORS

Term Expiring Spring 1981
Norma Dick, Clovis Unified School District, Clovis, California
Eleanor M. Ladd, University of South Carolina, Spartanburg, South Carolina
John C. Manning, University of Minnesota, Minneapolis, Minnesota

Term Expiring Spring 1982
Nicholas P. Criscuolo, New Haven Public Schools, New Haven, Connecticut
Bernice E. Cullinan, New York University, New York, New York
Patricia S. Koppman, San Diego Unified Schools, San Diego, California

Term Expiring Spring 1983
Elizabeth Hunter-Grundin, Schools Council, London, England
Alden J. Moe, Purdue University, West Lafayette, Indiana
Dianne L. Monson, University of Washington, Seattle, Washington

Copyright 1980 by the
International Reading Association, Inc.
Library of Congress Cataloging in Publication Data

Gentile, Lance M.
Using sports and physical education to strengthen reading skills.

(IRA reading aids series)
(An IRA service bulletin)
Bibliography: p.
1. Physical education and training—Curricula.
2. Reading—Aids and devices. 3. Sports—Bibliography.
I. Title.
GV363.G47 375.613'07 80-36805
ISBN 0-87207-225-8

Contents

Foreword *v*

Introduction *vii*

1 What Is Reading?

4 How Does Reading Fit Sports and Physical Education?

8 Reading Activities for the Sports/Physical Education Curriculum

66 Evaluating Grade Levels of Difficulty for Reading Materials

68 Coaches and Physical Educators as Models of Literacy

Appendix *72*

This Monograph is dedicated to the graduate students who have worked with me at Arizona State University, Pan American University, Oregon State University, and North Texas State University. As individuals the following people have contributed to my appreciation of reading/thinking during athletic competition:

Dave DeBusshere
Don MacDonald
Jim Bouton
Bruce Fowland
Don Shula
Jim Fitzgerald
Lenny Wilkens
Bruce Gentile
Roger Bannister
Hank Zurretti
Ken Rosewall
Eldon Rouse
Jack Ramsey
James Corcoran
John Wooden
Bill Russell
and
Senator Bill Bradley

IRA PUBLICATIONS COMMITTEE 1980-1981 Robert B. Ruddell, University of California at Berkeley, *Chairing* • Phylliss Adams, University of Denver • Alison Bellack, Largo (Florida) C & I Center • Janet R. Binkley, IRA • Faye R. Branca, IRA • Jerry L. Johns, Northern Illinois University • Lloyd W. Kline, IRA • Carol Kuykendall, Houston (Texas) Public Schools • Eleanor M. Ladd, University of South Carolina at Spartanburg • Grover Matthewson, Florida International University • Christina Neal, St. Albans, West Virginia • Joan Nelson, State University of New York at Binghamton • Lloyd O. Ollila, University of Victoria • P. David Pearson, University of Illinois at Champaign • María Elena Rodriguez, Asociacion Internacional de Lectura, Buenos Aires • Carol Sager, Chestnut Hill, Massachusetts • S. Jay Samuels, University of Minnesota • Lyndon W. Searfoss, Arizona State University • Ralph C. Staiger, IRA • Judith Thelen, Frostburg (Maryland) State College • Joanna Williams, Teachers College, Columbia University.

The International Reading Association attempts, through its publications, to provide a forum for a wide spectrum of opinion on reading. This policy permits divergent viewpoints without assuming the endorsement of the Association.

Foreword

During the more than four thousand year history of physical education, almost every age and race has agreed on the importance of athletics, although the emphasis has varied in degree and kind of exercise. In the United States today there is a need for well-rounded programs of instructional, intramural, and interscholastic athletics. The programs should be designed to maintain fitness among our youth and develop in them the interest in exercise which will help them see the need for a healthy body to carry them throughout adult life. It is a goal worthy of a health conscious nation. If one's body is not properly developed and nourished, the mind will refuse to act as it should.

Objectives to be attained through school physical education and athletic programs are those which have predominant muscular, energy, coordination, and health components in the response. It is true that one may learn while relatively motionless physically—as in reading, memorizing, reasoning, appreciating, or deriving percepts—but, whenever components of motion are involved, the physical movement is brought into operation. Typical examples of abilities based on physical motion include such activities as reading, writing, typing, manipulating machines, pronouncing, singing, sewing, playing musical instruments, and practicing other similar movements. Simultaneous

with motion, the strength and endurance necessary to carry out the activities are provided.

Ancient Greeks were masters in all the arts. It is universally acknowledged that their masterpieces of sculpture, architecture, philosophy, drama, comedy, literature, and history are unsurpassed. Their bronzes, pottery, and tools arouse our admiration and delight. The Greeks were not merely a nation of artists but were also great warriors, merchants, colonizers, navigators, scientists, and above all, readers. They who had the brains to create the greatest masterpieces of all times also possessed abilities to compete in physical games and contests and to explore the secrets of good health while maintaining sound bodies and practicing athletic skills.

Schools across some nations are currently turning out students of intelligence and mental productivity who, to a great extent, have weak and unhealthy bodies. Sports and physical education can offer avenues of development through which individuals gain in physical strength, energy, endurance, and health as well as in mental capacity for learning, reading, and engaging in other scholarly endeavors. The attainment of well-adjusted, coordinated, controlled minds and bodies leads to better health, strength, skill, intellect, stability, and peace of mind for our youth. It is vitally necessary for all of us to take care of and cultivate our minds as well as our bodies.

Donald E. Carline
University of Colorado

I lay it down as an educational axiom that in teaching you will come to grief as soon as you forget that your students have bodies. This is exactly the mistake of the post-renaissance Platonic curriculum. But nature can be kept at bay by no pitchfork; so in English education, being expelled from the classroom, she returned with a cap and bells in the form of all-conquering athleticism.

— Alfred North Whitehead

Introduction

This booklet is written primarily for coaches and physical education instructors in the middle, intermediate, and secondary schools. However, the ideas and activities may be used effectively by classroom reading teachers at these levels to diversify their programs and motivate students to read. The purpose of the booklet is not to replace what is done through athletic preparation or instruction, but to serve as a supplementary and supportive guide for existing practices.

Recognition is long overdue for the fact that sports and physical education are unique because they represent a potential for the highest quality of learning. These areas can combine firsthand experiences and book knowledge. The English philospher, John Locke, wrote: "A sound mind in a sound body is a short but full description of a happy state in this world; he that has these two has little more to wish for."

We have not always acknowledged this twofold relationship and, certainly, in the United States the tendency has been to make a distinction between "intellectual" and "physical" types. In *Head Over Wheels* (*6*), one of the physicians directing the recovery of a critically injured youngster claims:

What Terry is a pro at is the physical part. In that he's lucky. He's used to weight-lifting. He knows the sensation of getting a message through to a specific muscle. He has the patience to undergo training. The cerebral types don't. They'll give it a try and when they don't get quick results a lot of them give up.

Many coaches and physical education teachers complain bitterly of their program's failure to be recognized as an integral portion of academia. They resent being viewed as an expendable frill; they fear fiscal restraints will mean immediate reductions in their area; and they feel a constant pressure to wage war against the threat of administrative cut-backs.

There is good reason for this concern, since many school board members and administrators do not perceive sports and physical education as possessing the content or capacity for equal status in the academic community. Unfortunately, the profession itself has been slow to combat this erroneous impression. A reading-thinking component of athletic instruction needs to be developed to compliment and coincide with the extensive performance based element.

This does not mean the focus in athletics should move to written material as a basis for learning or that all coaches and physical education personnel must become reading teachers. To recapitulate standard academic procedures in these areas would be to divest students of the rare opportunity to express themselves in school at an entirely different level.

But sports and physical education can provide young people with real experiences around which to build their thinking. It is the balance between these two functions that is so necessary for complete intellectual growth.

Therefore, it is my firm hope this monograph will serve as a means for educators in the field to combine the forces of intellectual and physical activity. The ideas and exercises expressed herein have been developed through actual teaching and are designed for those who recognize the fertile training ground that sports and physical education offer to both the active and the learned worlds.

LMG

Chapter One

What Is Reading?

According to Hafner (*4*:39) it is important to define reading because "a person's definition of reading affects his attitude toward reading; the way he reads, what he will read, and for what purposes he will read."

Generally, reading can be defined in two different ways. The first concerns using one's knowledge and experience to interpret various signs, symbols, gestures, signals, or pictorial illustrations. A Native American has the uncanny ability to "read" impressions in the dirt or messages rising through the air in the form of smoke puffs, a CB operator "reads" a "good buddy" loud and clear, a doctor "reads" X-rays and symptoms of various diseases, a quarterback "reads" an opponent's defensive alignment, a psychologist "reads" body language, a backpacker "reads" compasses, a sailor "reads" semaphore or the weather, and a deaf person "reads" lips.

Second, reading refers to an individual's capacity to recognize graphic symbols or written words and understand, explain, or critique ideas in print. Reading concerns a person's ability to recall or paraphrase an author's direct and inferred meanings.

Stated specifically, reading is thinking. Any definition of reading that does not include thought as its primary aim is grossly underrated and misleading. During reading and afterward, while contemplating what was read, an individual's reasoning is swayed, strengthened, or, in some way, altered by a series of symbols. These same symbols may create physical and emotional reactions as well.

From these definitions it is obvious that much of what goes on traditionally in teaching people to read is better seen as skill development and preparation but not "reading." Teachers have even been heard to say, "All right, let's put away our books now, it's time for reading." Through this distorted lens, it is small wonder that many students view the act of "reading" as tiresome drill or related tedium.

Regardless of what happens in school with written material or how students come to perceive reading, it appears that most people spend many of their waking hours reading, testing their ability to read, or taking advantage of the insights gained from a host of background experiences to improve their reading.

What Purposes Are There for Reading?

Reading as a Duty

Much of what we read is obligatory. The demands of business, job, or school force many of us to collect required or helpful information as a means of accomplishing some task. This type of reading requires competencies necessary to process expository material for making reports, taking tests, following directions, and developing other specific skills.

Reading as an Art

The art of reading describes the enjoyment or growth a person realizes while exploring an author's ideas. It considers reading as a form of contemplation whose purpose is to affect intellectual, spiritual, and emotional development. This type of reading precludes duty or obligation and takes place on or off the job, in school or despite school.

Both kinds of reading are essential in today's world: the first for job or school success; the second for entertainment, joy, personal fulfillment, and stimulation or escape from some of the drudgery and humdrum of work or formal education.

When Will Students Learn to Read or Choose to Read?

The answer to this question is simple. Students will learn to read or choose to read when it makes sense to do so. This places teachers in an interesting position. Their job becomes one of helping students discover reasons for reading and for finding a place in their lives for reading. Unfortunately, many never see how reading might fit, and fail to make any sense of it. For these youngsters reading remains mostly nonsense. They have learned to do certain pages in their workbooks to get this or that; to read special books to please a parent or teacher; to answer so many questions after reading; to complete required tasks to be promoted to the next grade; to read to get into college, graduate, and become "educated" in the eyes of the world; or to read material to pass a test for any number of reasons related to job or school.

In short, many students see reading strictly as a duty. They fail to experience anything beyond a sense of responsibility or frustration when it comes time to read. These youngsters never equate reading with art or to what Malcolm X (7:179) referred to in his autobiography as an inherent drive to read:

> I have often reflected upon the new vistas reading opened to me. I knew right there in prison reading had changed forever the course of my life. As I see it today, the ability to read awoke inside me some long dormant craving to be mentally alive. I certainly wasn't seeking any degree, the way a college confers a status symbol upon its students. Not long ago, an English writer telephoned me from London, asking questions. One was, "What's your alma mater?" I told him, "Books."

Chapter Two

How Does Reading Fit Sports and Physical Education?

In one sense, reading *is* a sport. It requires mastery of fundamental skills, sufficient practice, a well-balanced diet of literary experiences, and a lifetime of development. In addition, readers need good models and coaches to become successful, active participants rather than mere spectators.

Since the dawn of Western Civilization educators have recognized the crucial relationship that exists between physical activity and learning. Plato placed gymnastics at the highest level for training his philosopher-king. Spinoza claimed, "Teach the body to do many things; this will help you perfect the mind and come to the intellectual level of thought."

Currently, sports and physical education are popular fields for study because of expanded leisure, the growth of a national interest in physical fitness, and the media's broad coverage and glorification of athletes/athletics.

Because they have had ample real experiences in these areas, this subject matter makes sense for many young people. It provides a vehicle to stimulate those who are disinterested in academic pursuits or are unwilling to read diverse materials and it can be used to strengthen the abilities of good students and

enthusiastic readers as well. Unfortunately, current instruction in the world of athletics places major emphasis on physical performance. Accomplishment in this area relies heavily upon developing bodily strength, balance, agility, stamina, and coordination. Consequently, coaches and teachers frequently neglect or overlook entirely:

- Sports training and physical education courses as formidable means of advancing students' reading and writing skills, and
- the amount of influence they may exert as models of literacy.

By ignoring these potentially powerful contributions to the athletic and health curricula, education suffers in two ways. First, youngsters are denied broader understanding and deeper appreciation of sports events, various games, or the development and care of their bodies. Second, the schoolwide reading improvement effort loses a valuable component.

Today, for one reason or another, a shroud of mystery surrounds the teaching of reading. Confounding this issue is the fact that teachers and administrators, at all levels, are blamed for students' failures to demonstrate reading proficiency. Often, the mere mention of reading is enough to create panic, opposition, or both among many content area teachers, including those in sports and physical education. Herber (5:3) said this generally occurs because they are coerced into teaching reading, they do not want to become reading teachers, and they do not want to divert time from their curriculum to teach reading.

Apparently, many content teachers view the suggestion to incorporate reading instruction in their classes as an unwarranted, onerous responsibility. They see this effort as a subversive administrative mandate which greatly hampers coverage of *their* subject material.

Subsequently, the teachers complain of the elementary school's negligence in doing its job and share legitimate concerns that their professional preparation does not include teaching

students to read. Unfortunately, this is frequently true and contributes mightily to resistance and lack of understanding.

However, the teaching of reading through diverse content fields and in the intermediate or upper grades represents an effectively sound pedagogical approach, regardless of the subject material or pupil's age. Ultimately, it is a way of teaching content more efficiently and affording students the required literary tools to succeed in their course work.

Much of the confusion and resistance over using sports and physical education as aids to teach reading can be traced to a general misunderstanding of the reading process itself. Some coaches and teachers are not only unclear as to what reading is and how it is taught in the content fields, but find themselves at a loss to describe the importance it may hold for students' long range growth and development.

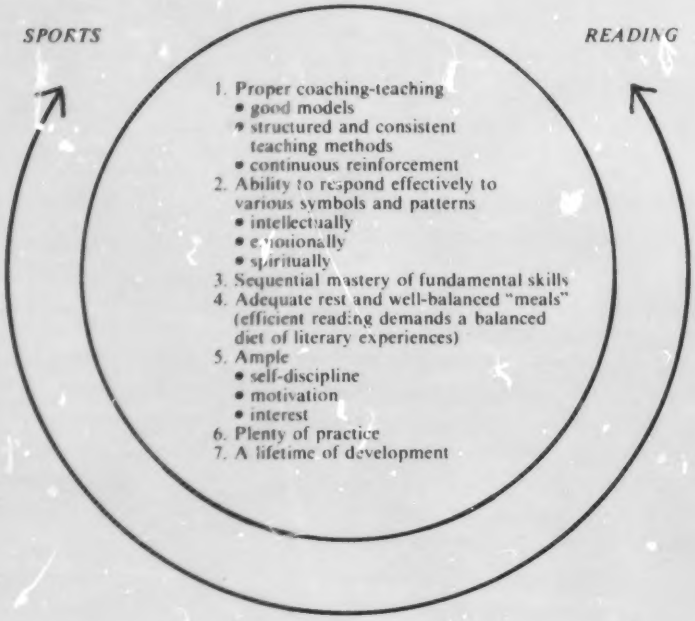
Additionally, many think of reading as something that is done within academic circles and, therefore, nonessential to athletes or to those interested in physical fitness. This perspective is delimiting for several reasons:

1. It confines reading to the written word.
2. It excludes reading and the development of higher level thinking skills from sports and physical education.
3. It refutes the connections in learning between mind and body, thought and action.
4. It dissociates intellectual principles or aims from athletics and tends to reaffirm the "bonehead" label popularly applied to most sports and physical education courses.
5. It discounts reading as a favorable method of bolstering the acquisition of playing or performance skills and of unfolding innumerable mental and physical health concepts people of all ages can apply toward happy, wholesome living.

As stated previously, sports, physical education, and reading parallel one another closely. Thoreau (*10*:180) said:

To read well, that is to read true books in a true spirit, is a noble exercise, and one that will task the reader more than any exercise which the customs of the day esteem. It requires a training such as the athletes underwent, the steady intention, almost of the whole life to this object.

The following diagram shows the proximity of both areas.



Chapter Three

Reading Activities for the Sports/Physical Education Curriculum

The following exercises provide ideas for building a reading/thinking skills component into the athletic curriculum. These examples are not meant to be complete instructional packages but they can serve as models from which coaches and teachers might create their own programs. They guide and suggest rather than dictate ways to enhance learning in sports or physical education and should not be employed as simply paper and pencil drill-work. A more acceptable approach would consist of using these ideas and materials to stimulate group discussion and reading or writing activities. They might also act as follow-up exercises and reinforcement for performance based instruction or serve as a means of motivating many youngsters who would not otherwise practice literary skills. Those teaching or working in the lower grades will want to modify the language and format of these activities to suit their specific purposes.

- **General Skill**—Reading to follow a sequence of directions and relating these to diagrams or charts.

Purpose. Diagrams and charts are helpful to reinforce learning. Explanation time is reduced when players are already familiar with assignments and know what is expected of them prior to running actual patterns.

Objectives. Upon completion of this activity, players will read for these purposes.

1. To understand specific vocabulary and terms with multiple meanings.
2. To follow directions.
3. To compare written instructions to a diagram.

Material. Diagram of the Buttonhole play and blank diagram of a basketball court.

Procedure. The player and coach or teacher work together to interpret a diagram of the play. Using the diagram, they discuss the following specific and multiple meaning vocabulary.

option	play	court
defense	offense	screen
pivot	lay-up	pattern
inbounds	feed	sags
key	execution	diagonally

Players are then given the opportunity (either through writing or through further discussion) to compare these terms and their meanings.

Matching.

option	1. A legal attempt to prevent an opponent from reaching the desired position.
defense	
pivot	2. An alternative to the original.
inbounds	3. Passing the ball to a team member.
feed	4. A manner of conducting the play.
lay-up	5. The easiest shot in basketball.
screen	6. The area directly in front of the basket designated by an "alley" and large circle.
pattern	
key	7. A generally rearward movement made by a defensive player to interfere with offensive play execution.
diagonally	
execution	
sags	8. Movement from an angle of 45 degrees.

Using the inserted blank diagram, players either write or prepare to discuss each team member's responsibility for proper execution of the play.

Example.	What are the duties of player C?	(F)
	When does player E break to the basket?	(F)
	What are player B's options?	(F)
	When is the ball inbounded?	(F)
	Who can think of some options for this play? Illustrate them on the blank diagram.	(I)
	How would you defend against this play?	(I)

The coach or teacher will observe the first four questions are factual (F) but the last two ask the players to make an inference or generalization (I). Instructors are encouraged to vary their questions for purposes of eliciting higher level thinking.

Out of Bounds Play #1 (The Buttonhole).

Taking the ball out of bounds at side mid-court:

Team members' assignments—A B C D E (designate individual players)

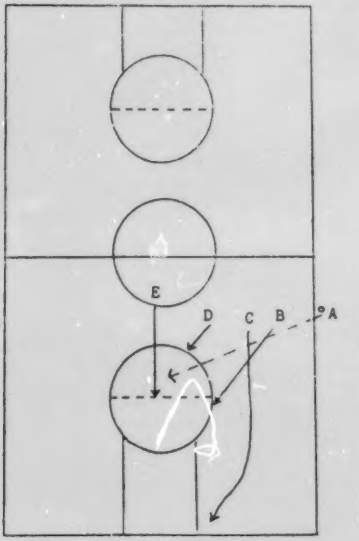
Player A starts the play. S/he will inbound the ball. Player A slaps the ball as a signal to other team members to begin executing the play. Player A passes over the defense to player E as s/he makes a break straight to the basket.

Player B stands just inside the boundary line. At the slap of the ball, moves diagonally to the basket for feed or rebound.

Player C stands directly behind player B. At the slap of the ball moves to the low-post side of the key for feed or rebound.

Player D stands directly behind player C. At the slap of the ball moves to the top of the key to receive possible pass.

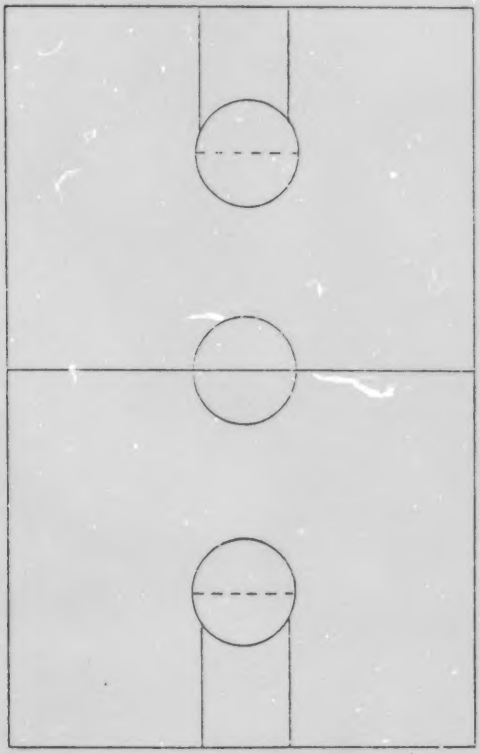
Player E stands at mid-court. At the slap of the ball breaks directly to the basket to receive the ball and shoot the lay-up.



Pass = — — — →

Moving to position = ⟶

On the diagram below indicate player position and movement to execute out of bounds play #1 (The Buttonhole).



Supplementary Activities.

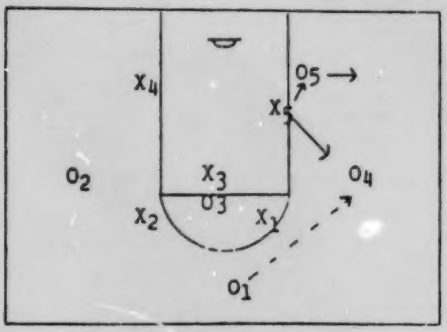
The following exercises are designed to help players strengthen their knowledge of basketball through reading. These activities reinforce and extend previous learning.

Reading Skills.

1. Understanding specific vocabulary and terms of multiple meaning.
2. Following directions.
3. Comparing written instructions to diagrams.
4. Making inferences and assumptions based on diagramed plays.

Activity 1. Offensive movement against the 2-1-2 zone defense.

In combating the 2-1-2 zone, player O_1 initiates an attack by passball to player O_4. At the same time, player O_5 moves toward the corner forcing the back defensive player, X_5, to go along or to cover O_4.



Discussion questions.

1. If X_5 covers player O_4, where should the pass go?
2. Should a shot be taken from the corner, what responsibility does O_1 have?
3. If X_5 moves position, which player should roll into the open?
4. How would this same play be set up on the other side of the floor?
5. Which weaknesses can you find in a 2-1-2 zone defense? Strengths?

Activity 2. Variations of the challenge game H-O-R-S-E.

Rules for H-O-R-S-E:

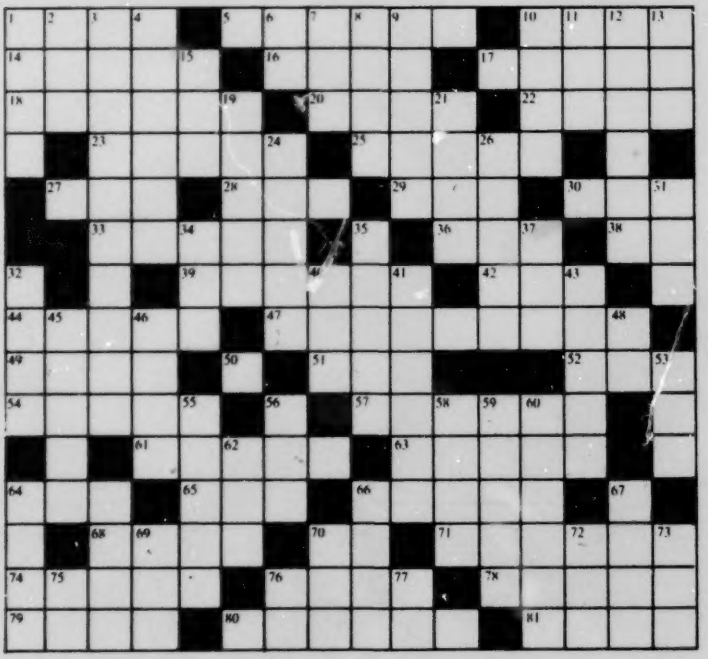
1. Players take turns attempting various shots at the basket.
2. When one player makes a shot, the next one must make the same shot or incur a letter (H, etc.).
3. As soon as a player has incurred H-O-R-S-E, he is out of the game.
4. The player who never spells out HORSE against himself wins.

Players compete according to the same rules but use:

E-X-E-C-U-T-I-O-N S-C-R-E-E-N

D-I-A-G-O-N-A-L

Activity 3. Players can gain concommitant experience in reading and language development and advance their knowledge of basketball by working the following crossword puzzle.



ACROSS

1. Ball passes legally through basket.
5. Planned method of play.
10. Fast break toward basket.
14. The _____ circle within the center restraining circle.
16. A pivot enables a player to _____ in any direction.
17. If both captains do not _____ to play a modified rule, official rules must be used.
18. To _____ the ball for more than five seconds when closely guarded is a violation.
20. A player legally _____ up the ball when placing one or both hands firmly on the ball held by an opponent.
22. Basketball standards recommend that guards be provided for all girls who _____ glasses.
23. An official may _____ a substitute to the game only when time is out.
25. A full court _____ is a strenuous type of defense.
27. There is no _____ requirement for obtaining a rating as an Intramural Basketball Official.
28. Number of minutes between halves.
29. On a jump ball, a player may _____ the ball only while in her own half of the restraining circle.
30. In order to prevent an interception, a dribble should be kept _____.
33. The official shall _____ both players to jump if neither touches the ball the first time it is tossed.
36. Players and coach should _____ out their strategy before game time.
38. If a forward fouls while in the act of shooting, _____ points are scored.
39. The official in charge of the game shall _____ her authority in deciding any question not specifically covered in the rules.
42. A zone defense endeavors to create a "_____ de sac" for the opposing players.
44. All teams should have this quality.
47. A coach likes to have a player who is _____.
49. A team will _____ possession of the ball if they commit a violation.
50. It takes a good "_____" to shoot baskets.
51. Basketball practice for high school girls should be limited to two hours per _____.
52. It is a foul to _____ the ball into an opponent.
54. The Official Basketball Rules as adopted by the National Basketball Committee is the _____ of the official rule book.
57. The Guide is the _____ of rules and standards for girls and boys who play basketball.
61. Free throw _____ shall be marked at each end of the court perpendicular to the end lines.
63. It is the _____ procedure for the officials to meet with the captains before game time.
64. Intramural officials may not accept _____ for officiating a basketball game.
65. If a blue player combines an air dribble and a limited dribble, the red player will _____ the ball out of bounds.
66. A strategy sometimes used in the closing minutes of the game.
68. A successful feint would be one which _____ an opponent off balance.
70. "I," "_____," "mine" are words which do not contribute to teamwork.
71. A skillful player _____ fouls out.
74. Source of energy.
76. The purpose of the 3-second lane rule is to prevent a _____ offensive player from remaining under the basket for a long period of time.
78. When the team captain is not on the court, another player shall _____ as

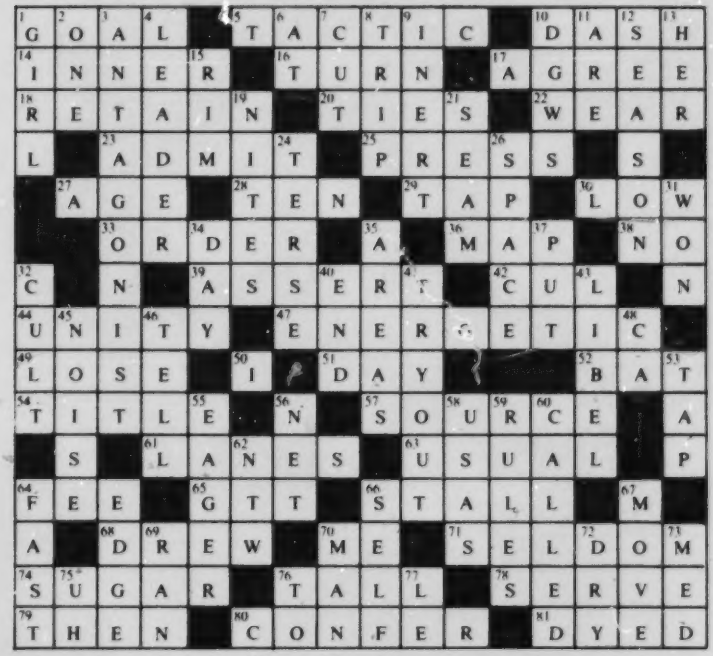
acting captain.

79. A substitute must be recognized by an official before entering the game during time-outs and between quarters. Only _____ may she come onto the court.
80. During time-outs, the players may _____ with the coach at the bench.
81. Painted or _____ floor areas may be used to indicate boundaries.

DOWN

1. A charging foul will be called on the _____ with the ball if she dribbles into a stationary opponent.
2. A player may be removed from the game if she commits even _____ disqualifying foul.
3. Opponent.
4. As _____ of the team, the captain is responsible for getting the names and numbers of the team in order to assist the coach.
6. When the ball goes out of bounds, the throw-in is taken _____ the spot where it left the court.
7. A player should learn to _____ for the basket to receive a pass.
8. To hold, push, or _____ an opponent is an individual foul.
9. Keeping the ball inflated according to specifications will prevent it from becoming _____
10. The group formerly responsible for formulating the basketball rules and standards by which girls and women played.
11. Handling the ball, kicking the ball, and striking the ball with the fist _____ violations.
12. The total length of the basketball _____ should be no longer than ten weeks for high school girls.
13. A player must raise _____ hand when she is charged with a foul.
15. A player taking a free throw may not cross the free throw line until the ball touches the backboard, the _____ of the basket, or enters the basket.
19. Games scheduled for _____ are not always advised for high school girls. (colloquial use)
21. A fold or line on a basketball.
24. The official's instructions to the scorers and timers should be thorough but _____.
26. The ball should be passed to a _____ ahead of a moving teammate.
31. A tie game is _____ by the team which is ahead by one point at the end of any extra game.
32. What the group that worshipped Coach John Wooden might be called.
34. Vigorous practices should not be scheduled the _____ of a game.
35. In a zone defense, players (defensive) are responsible primarily for their own _____.
37. If a free throw is made, the ball shall be _____ in play from out of bounds at the end line by the opposite team.
40. The timer's whistle at the _____ of the fourth quarter officially ends the game.
41. Girls should not be permitted to _____ _____ for an extramural team unless they have had a medical examination. (two words)
43. The authority to call a team foul protects an official from disrespect and _____.
45. If the timer's whistle cannot be heard above the _____, the timer should go on the court to notify the umpire of the expiration of playing time.
46. A substitute must _____ the scorer her name, number, and position before entering the game.
48. Basketball standards are based in part on the _____ of the participants. (initials)

53. To constantly and repeatedly touch an opponent.
55. Most girls are _____ to play basketball.
56. A type of shot.
58. A _____. _____. _____. *girl's amateur team has competed internationally.*
59. The first official basketball _____ for girls and women were adopted at Springfield, Massachusetts.
60. A defensive player shall be _____ for obstruction if she moves into the path of a player who has started to advance the ball, and personal contact results.
62. If a _____ ball is provided for a game, neither team shall use it in practice.
64. By combining a feint and a dodge, an _____ offensive player can often elude her opponent.
66. Tossing the ball to one's _____ is a juggle.
67. After a two-step stop, a player may _____ only her forward foot.
69. A player who _____ out of the court and returned at a more advantageous position would be committing a violation.
70. A defensive player should never let her _____ get between her and the basket.
72. Powdered rosin may be used to _____ hands and shoes which are slippery.
73. _____ supplies should be available during all practices and games. (abbrev.)
75. A type of pass. (2 words, initials)
76. It is a foul _____ leave the court during playing time without permission of the official.
77. A team captain receives good leadership experience. (initials)


1 G 2 O 3 A 4 L 5 T 6 A 7 C 8 T 9 I C 10 D 11 A 12 S 13 H
14 I N N E 15 R 16 T U R N 17 A G R E E
18 R E T A I 19 N 20 T I E 21 S 22 W E A R
L 23 A D M I 24 T 25 P R E 26 S S S
27 A G E 28 T E N 29 T A P 30 L O 31 W
33 O R 34 D E R 35 A 36 M A 37 P 38 N O
32 C N 39 A S S 40 E R 41 T 42 C U 43 L N
44 U 45 N I 46 T Y 47 E N E R E T I 48 C
49 L O S E 50 I 51 D A Y 52 B A 53 T
54 T I T L 55 E 56 N 57 S O 58 U 59 R 60 C E A
S 61 L A 62 N E S 63 U S U A L P
64 F E E 65 G T T 66 S T A L L 67 M
A 68 D 69 R E W 70 M E 71 S E L 72 D O 73 M
74 S 75 U G A R 76 T A L 77 L 78 S E R V E
79 T H E N 80 C O N F E R 81 D Y E D

- **General Skill**—Reading to understand the history of a sport or game.

Purpose. Knowledge of a sport or game's history and development can add tremendously to students' appreciation and understanding of the rules, equipment for play, etiquette, object or purpose of participation, and procedural strategies.

Objectives. Upon completion of the activity students will read to:

1. Identify new terminology.
2. Locate pertinent facts related to the reading that answer the questions "Who?" "What?" "When?" "Where?" "Why?" and "How?"
3. Compare and contrast various elements of the sport or game from historical and current perspectives.

Material. Any printed description of the history or development of a sport or game. This may appear in a textbook, magazine, or pamphlet.

Procedure. The coach or physical education instructor entertains a discussion with the students of unfamiliar or technical vocabulary in the article prior to the students' reading. Afterwards pupils are given an opportunity to test their understanding and recall by answering questions either orally or in writing.

Example. Archery

Vocabulary:

primitive	Knights of France
archery	Robin Hood
down through the ages	victor
Egyptians	tournament
Persia	fascination
longbow	William Tell
Henry V	coordination
armored	techniques

One of our oldest weapons is the bow and arrow. It was used 25,000 to 50,000 years ago. Even today it is still the weapon

of many *primitive* peoples. Primitive people used the bow and arrow for the purpose of obtaining food and for defense against enemies.

Down through the ages, archery has been practiced for both hunting and warfare. Many successful battles were fought with the bow and arrow as the chief weapon, such as the war in which the *Egyptians* overthrew *Persia*. The *longbowmen* of England were chiefly responsible for *Henry V's* victories over the *armored Knights of France*.

Quite early, also, bows and arrows were used in contests of skill. One of the better known contests is the legendary one in which *Robin Hood* was the *victor*.

With the development of firearms and the use of gunpowder, archery lost its place in warfare but continued to hold a place in sports. The earliest known archery *tournament* was in England in 1673. The use of the bow in the United States naturally followed the pattern established in England. In 1878 the first archery club in this country was organized in Philadelphia and is still in existence.

Archery is an individual activity which can be enjoyed at almost any age and by both sexes, either indoors or outdoors. Archery has a special *fascination* for most of us. We can remember playing Indian with a homemade bow and arrow and listening to the *legends* of Robin Hood and *William Tell*.

With interest increasing in this activity, perhaps you are thinking you would like to learn archery. It is a great challenge to try and achieve the *coordination* of muscles and eyes needed for skill in archery. This exercise can help you strengthen the muscles needed for good posture.

To enjoy archery fully, skill is required, and to obtain this skill you must practice certain *techniques*. But even before this you need to be fitted with the necessary equipment.*

---

* Text from *Physical Education for High School Students*. Reprinted by permission of the American Alliance for Health, Physical Education, and Recreation, Washington, D.C. Copyright 1955, pp 23-24.

Vocabulary Review. Choose the one term of four listed that is a good synonym for each word below.

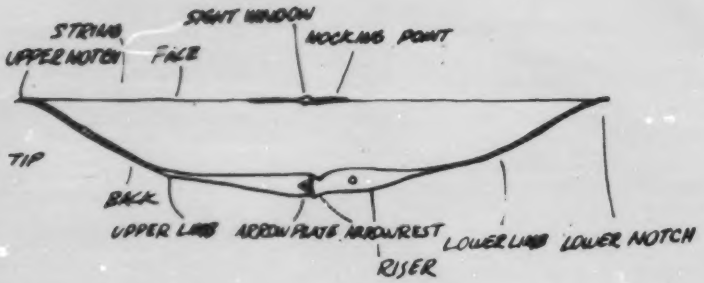
1. Primitive
   a. conscious c. fiery
   b. hairy d. original
2. Armored
   a. vulnerable c. founder
   b. protected d. organized
3. Victor
   a. winner c. artist
   b. defender d. capable
4. Tournament
   a. jamboree c. series
   b. fight d. free-for-all
5. Fascination
   a. anger c. jeopardy
   b. morbid d. captivation
6. Techniques
   a. miracles c. methods
   b. figures d. classes
7. Coordinat[illegible]
   a. arran[illegible]t c. impression
   b. cont[illegible] d. exercise
8. Robin Hood
   a. character c. king
   b. bandit d. pioneer

Questions

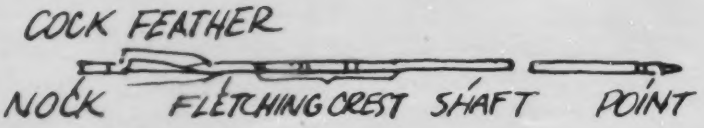
1. Who were the first people to use bows and arrow ? For what purposes?
2. What are some of the different ways archery has been used historically?
3. When did the first archery tournament take place? Where?
4. To what might you attribute Henry V's victories over the armored Knights of France?
5. Where was the first archery club organized in this country? When?
6. Why is archery a unique sport?
7. Why does archery add to good posture?
8. Why do you think you might enjoy archery?

Supplementary Activity.

Archery: Vocabulary exercise related to sports equipment. Using a diagram similar to the one below discuss with students terms identifying various parts or sections of an apparatus, outfit, armament, etc.



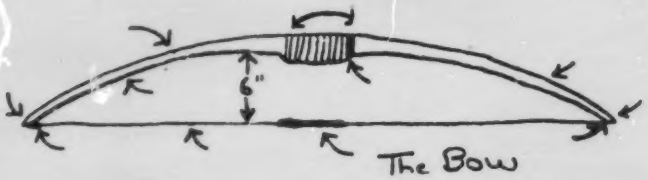
Parts of Bow

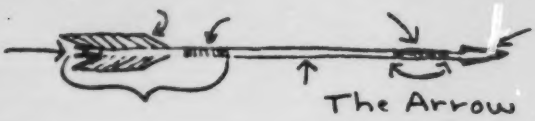


Parts of Arrow

Reproduced from *Physical Education for High School Students*. Copyright 1970, American Alliance for Health, Physical Education, and Recreation, Washington, D.C., p. 38. Reprinted by permission.

After youngsters have had ample opportunity to familiarize themselves with the words and their points of reference on the drawing, let them see how many they can rewrite next to the arrows on the following blank sketch.





- **General Skill**—Reading to understand athletic courtesy and sportsmanship.

Purpose. Today, the ethic, "Win no matter what," is a primary barometer in sports. Many players have not learned or simply do not apply standards of fair play while participating in certain sports or games. A great deal of dispute and confrontation on the field or court can be avoided when young people learn to behave equitably.

Objectives. Upon completion of this exercise students will:

1. Identify terms related to sports courtesy.
2. Answer questions related to acceptable behaviors during play.
3. Role play various situations from TV, newspapers, or magazines depicting either an athlete's graciousness or brutality in a particular contest.

Material. A printed set of established behaviors for a particular sport or game. Published accounts of amateur or professional athletic conduct.

Procedure. Using a list of established practices or an article from the newspaper or a magazine, the coach or physical educator discusses acceptable and unacceptable conduct relating to specific play situations. Terms applied to courteous or discourteous behavior are explained and discussed. Players or students are asked to answer questions with reference to hypothetical or actual occurrences and to role play *their* reactions in the same situations. These are used to fully clarify appropriate bearing before, during, and after play.

Example. Etiquette: Badminton/Tennis

Vocabulary (courtesy and good sportsmanship):

etiquette	lose gracefully	competitive
obnoxious	good spirit	good sportsmanship
win gracefully	congratulate	

Etiquette in badminton simply means the courtesy which players show each other in the game. *Courtesy* and *good sportsmanship* imply knowing how to *win or lose gracefully* and

being able to accept all decisions in a *good spirit*. Some other specific points that apply to both badminton and tennis are:

1. Your visitors should have the choice of side or service.
2. The server keeps the score and calls it before each serve.
3. Never walk behind a court while a rally is underway.
4. Refrain from bothering another court for your shuttle until the rally is over.
5. Do not play singles if others are waiting to play.
6. Be sure your opponent is ready before you serve.
7. The losers of a match should congratulate the winners.
8. Help your partner, opponents, and any spectators enjoy the game by being courteous and cheerful.*

*Text reprinted from *Physical Education for High School Students*. Copyright 1970, pp. 53-54. Alliance for Health, Physical Education, and Recreation, Washington, D.C. Reprinted by Permission.

Questions for Discussion and Role Playing.

1. You have invited a friend to play badminton (tennis) at a particular site. Who decides which of you will serve and selects the court to initiate play? How do you arrive at this decision? Demonstrate to the group.
2. There is a match underway next to you. Your shuttle (ball) is hit across the neighboring court while those players are in the midst of a rally. How do you go about retrieving your shuttle (ball)? Show what you would do in this case.
3. Your friend is a weaker (stronger) player than you are but manages to beat you. How do you react? What would you say? Do? Demonstrate.
4. What does it mean to be "competitive"? How can a player be competitive and avoid being obnoxious? Which athletes seem competitive to you? Why? Which are obnoxious? Why? Demonstrate competitive behavior under certain game circumstances. Now show the same situations and some inappropriate behaviors.

Supplemental Activity.

The instructor brings to class articles describing various athletes' behavior and asks students or players to read these. The class is divided into discussion groups to present the issues of each case. Students provide alternatives to the behavioral situations and role play some different responses. They are asked to defend their positions.

- **General Skill**—Reading to understand scoring procedures for various sports and games.

Purpose. Sports and games require participants to compute scores rapidly and accurately. Written instructions help introduce the terminology and procedures of keeping score.

Objectives. Upon completion of this activity students will read to

1. Follow directions.
2. Understand technical terms used to score a particular sport or game.
3. Understand what constitutes a score and the different ways to score during play

Material. Any printed set of rules for scoring a certain sport or game may be used. This could appear in a textbook, magazine, or pamphlet.

Procedure. The coach or physical education instructor discusses with the students appropriate scoring methods. During this time new or technical vocabulary is explained. Afterwards players are given written scoring instructions and asked to read them. Later they are questioned to determine their level of understanding. During the questioning period the coach or instructor may refer to the assigned pages for purposes of clarifying word meanings, scoring sequences, systems, or additional instructions.

Example. Tennis

Vocabulary:

love	set	advantage-in
deuce	match	(ad-in)
baseline	service court	advantage-out
playing lines	(right and left)	(ad-out)
fault		

Old traditions have given us the terms used in scoring. Points could easily be scored 0, 1, 2, 3, and 4, but in tennis they are called as follows:

0	love
1	15
2	30
3	40
4	game

The score 40-40 is called *deuce.*
The point after deuce is called *advantage.*

The server's score is always given first. Some examples of scoring: love-15, love-30, love-40, game to the server's opponent. Or in the case of a tied score in the game: 15-all, 15-30, 30-all, 30-40, deuce (instead of 40-all), advantage server, game, if the server wins the point after his advantage. If the server loses the advantage point, it is deuce again; and so on until one player wins two consecutive points after deuce, to win game. To win a game, a player must win at least 4 points and be 2 points ahead of his opponent.

The player who first wins six games and is two games ahead of his opponent wins the set. If one player wins six games and is only one game ahead, play must continue until one player is two games ahead. For example, a *set* may be won by scores of 6-love, 6-1, 6-2, 6-3, 6-4, 7-5, 8-6, 9-7, and so forth.

A contest or *match* is when one player wins two out of three sets, or in national tournaments three out of five sets for men and two out of three for women.*

*Text reprinted from *Physical Education for High School Students.* Copyright 1955, pp. 249-250. Reprinted by permission of the American Alliance for Health, Physical Education and Recreation, Washington, D.C.

Some Basic Rules.

1. The server must serve from behind the baseline.
2. The server has two chances to serve into the proper court on each point. If both serves are at fault, he loses the point.

3. The server must serve in alternate courts throughout the game, serving the first point into the right service court and the second point into the left service court, and so on.
4. The server serves one whole game, then alternates serving game with his opponent for the rest of the match.
5. The serve must bounce before the player returns it. All other balls may be hit before the bounce, or after only one bounce.
6. Balls which land on the playing lines are good.

Vocabulary practice. Match the term on the left to the definition on the right.

1. _____ love	a. Consists of two out of three sets for women.
2. _____ deuce	b. The player who puts the ball into play.
3. _____ fault	c. The player who receives the serve.
4. _____ match	d. No score.
5. _____ service court	e. The score is tied at 40-40.
6. _____ baseline	f. The point after deuce in favor of the server.
7. _____ playing lines	g. The point from behind which the server serves the ball.
8. _____ ad-in	h. The point after deuce in favor of the receiver.
9. _____ ad-out	i. The court boundaries.
	j. Describes the play in exclusion of the serve.

Questions for Further Practice.

1. Whose score is given first?
2. How many times does one person serve in a complete tennis game?
3. If the receiver returns the serve before letting it bounce what happens?
4. How many chances does the server have to serve into the proper court?

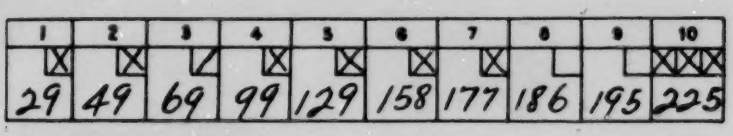
5. How many games must be won to take a set?
6. What is the margin that must exist between the winner's score and the loser's in each set?

Supplemental Scoring Activity (Bowling).

Allow students to read through the rules for scoring a bowling game. These can be found in pamphlets or books. Underline or point out new and technical words. Discuss these beforehand.

You will enjoy learning to score a bowling game. A perfect score is 300 points. A game consists of 10 *frames*. Each frame can be compared to an inning in baseball. Two balls are rolled in each frame except when you score a *strike*. If you knock down all the pins with the first ball, it is a strike, marked (X). If all the pins are knocked down with both balls in the frame you score a *spare*, marked (/). For a strike, you get 10 pins plus the total *pinfall* on the next two balls. For a spare, you get 10 pins plus the total pinfall on the next ball. If you make a strike in the tenth frame, you get 2 additional balls to be rolled *consecutively*; if you make a spare in the tenth frame, you get one more ball.

Look at the following score card and assume it is yours. At the end of the second frame, having made two strikes, you would have an X in each upper-right box but no *numerical* score. In the third frame, you made a spare, bowling over 9 pins with your first ball and the single with your second ball. So now you put down 29 for the first frame (10 plus your pinfall on the next two balls) and 49 for the second frame (29 plus the strike in the second frame plus the 9 for the first ball of the third frame). See if you can figure out why you have the score you have in the 7 remaining frames.



Reprinted from *Physical Education for High School Students*, copyright 1955, p. 93. By permission of the American Alliance for Health, Physical Education and Recreation, Washington, D.C.

- **General Skill**—Reading to follow rules and regulations of play.

Purpose. In any game there are rules and regulations participants must follow. A full understanding of these directives can be of major advantage to the players. Frequently, the individual or team that commits the fewest violations in a contest winds up the winner. Youngsters can cement their knowledge of the laws that govern play through reading experiences designed to refine and fortify learning.

Objectives. Upon completion of this activity students will

1. Understand and use technical language in discussing the rules and regulations for playing a particular game.
2. Compare vocabulary and written symbols related to specific aspects of play and the playing surface.
3. Answer a series of questions concerning various infractions committed during a contest.

Material. One written set of rules and regulations pertaining to a sport or game and a diagram of the playing area.

Procedure. The coach or physical educator introduces the rules of a game to students by making use of the following teaching techniques.

- Explanation—Instructors identify rules of play.
- Discussion—Instructors talk with the group about these regulations and clarify terms.
- Demonstration—Instructors show students exactly how infractions occur.
- Reiteration—Instructors repeat when necessary.

After this initial process the youngsters are given a rule sheet to study. On this page the instructor has underlined or colored specialized vocabulary and written symbols. Later students will be asked to apply their learning while answering vocabulary and comprehension questions based on a written set of rules and the diagrammed playing surface.

Example. Volleyball

Vocabulary (rules and regulations):

right back player (RB)
boundary line
underhand
sidearm
overhead
spike
opponents' court
side out
body foul
center line
side boundary lines
match
rotation
rectangular court
foot fault

Vocabulary Check.

Match each item on the left with the most appropriate definition on the right. Draw connecting lines.

Column A	Column B
1. body foul	—server steps on or over the end line at the moment the ball is hit
2. rotation	—decision following the infraction of a rule by the serving team at which time service is awarded to the opposing team
3. service	—act of shifting positions in a clockwise direction as shown in the court diagram
4. side out	—ball touches any part of a player below the waist
5. foot fault	—server hits the ball over the net to the opposite court until side out is called
6. right back player	—consists of the best two out of three games
7. underhand, sidearm, overhead	—may be stepped on but not over
8. spike	—the first server
9. match	—hitting the ball with the heel of the hand with a quick whipping motion
10. center line	—different ways to serve the ball

Rules of the Game.

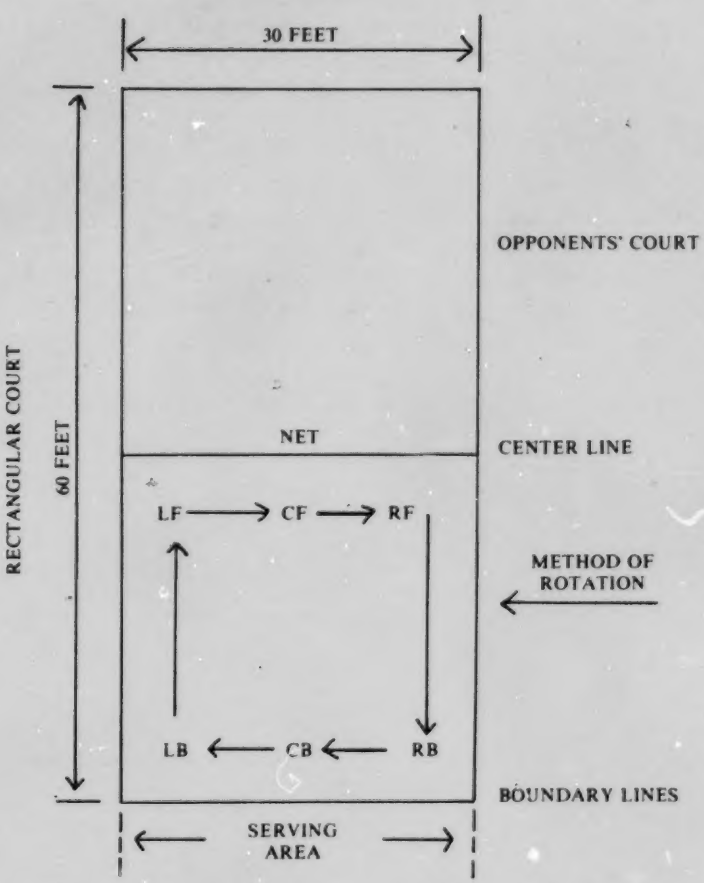
1. The playing surface shall be a *rectangular court* 60 feet long and 30 feet wide.
2. Team captains toss a coin for choice of serve and court. A team may not begin with fewer than 6 players.
3. The first server is the *right back player.* He may not touch the *boundary line* while hitting the serve, but he may strike at the bal with his hand in any manner, *underhand, sidearm,* or *overhead.*
4. Positions of players shall be as indicated in the court diagram (see the accompanying pages).
5. No player may touch the *opponent's court. The center line* under the net may be stepped on but not over.
6. *Rotation* does not occur until the first server from both teams has completed the first term of *service.* Thereafter, the team receiving the ball for service shall immediately rotate positions as shown in the diagram.
7. A player may not hit the ball twice in succession. However, the ball may be contacted a total of 3 times by a team before it is sent over the net.
8. The ball must pass between the side *boundary lines* as it crosses the net.
9. There shall be no contact with the net by ball or player.
10. A *match* consists of the best two out of three games.

Questions. Answer the following questions True or False. Read carefully and place a T (True) or F (False) in the space provided.

1. _____ The playing surface of the volleyball court measures a square 60′ by 60′.
2. _____ Team captains flip a coin to determine the choice of serve and the court.
3. _____ The right back player may touch the boundary line while hitting the serve.
4. _____ The ball must be served from an overhead position.
5. _____ Only the left front player may cross the center line.
6. _____ When a player "spikes" the ball he is allowed to touch the net.

7. _____ A player may not hit the ball twice in succession.
8. _____ Rotation occurs after the first server from both teams has completed the first term of service.
9. _____ When chasing a ball it is perfectly legal to touch the opponents' court.
10. _____ A team may begin play with 5 or more participants.

COURT DIAGRAM



• **General Skill**—Reading sports articles in newspapers or magazines.

Purpose. Many students read the sports section of newspapers and magazines. They are interested in players, coaches, games, and events. Reading in this area can furnish sports enthusiasts greater insights into athletics while providing a wealth of vocabulary and comprehension training.

Objectives. Upon completion of this activity students will:

1. Identify new or technical vocabulary related to sport, health, or physical education.
2. Critique a sports article from a newspaper or magazine.
3. Discuss current sports issues (based on their reading) with the instructor and class members.

Material. An article from a sports section of any newspaper or magazine.

Procedure. Coaches or physical education instructors ask students to read a sports article of their choice. Students cut the article from a newspaper or magazine and clip it to a worksheet provided by the teaching staff. The form may vary from time to time but this example requests students circle all unknown or technical terminology and rewrite a synonym for each. They are also encouraged to critique the story by responding to a series of questions. Afterwards, students and instructors use these worksheets as the basis for their discussion. Topics may include various players' or coaches' personalities and philosophies, strategies or principles of execution, training methods, nutrition, statistics or salaries, and contract negotiations.

Example.

Title of article _____

Author's name _____ Source _____

Date _____

List the new or technical terms you circled in the article:

1. _____ 3. _____

2. _____ 4. _____

5. _____ 8. _____

6. _____ 9. _____

7. _____ 10. _____

Based on how the word or phrase was used in this article, what do you think it means? See how many synonyms you can give for each. List them in the spaces below.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

Now check the dictionary to see how many of these you got exactly right. How many of your answers were close? Which did you miss completely?

Can you answer the following questions based on your article?

1. Do you think the writer presents an honest description in this article? If so, why? If not, why?

2. What would you say is the main idea of this article?

3. Which words does the author use to give readers good mental pictures of the issue, player, coach, or event?

4. What do you think is missing from this article? If you were the writer what would you have included? What did you find unnecessary or unimportant to the topic?

5. After reading the article, what else would you like to know about the subject or person in the article?

Coaches and physical education instructors may want their players or students to collect these articles and worksheets in a notebook. The content of these clippings helps stimulate discussions of topics from different perspectives. It also serves as an extremely vital activity for developing young people's vocabularies or figurative language and adds substantially to their overall reading capacity.

• **General Skill**—"Reading" the game of the week.

Purpose. Many young people spend hours watching weekend television coverage of major sports events. The "game of the week" may occur in basketball, baseball, football, tennis, golf, bowling, soccer, or hockey. Coaches and physical education instructors can make this a valuable athletic and academic exercise for players or students. By questioning and thinking about what happens during play, youngsters gradually become observers (readers) instead of simply remaining unskilled viewers (spectators).

Objectives. Upon completion of this activity students will:

1. Identify new terms used by sportscasters and players while discussing the game and describe whether these words are used appropriately.
2. Prepare answers to questions based on players' or coaches' performances, various game situations, playing conditions

that might influence the outcome of a contest, differences in defense or offense, and sportscasters' and sportswriters' comments.

3. Discuss with one another and the instructors their feelings and ideas regarding these issues.

Material. A prepared questionnaire that focuses the observer's attention on several different aspects of a "game of the week."

Procedure. The coach or physical educator asks players or students to make use of a questionnaire while watching the game of the week. Youngsters are requested to record on the worksheet their answers to each question. Their responses will be used as topics for discussion before class or practice begins on Monday.

Example. TV Game — Football

News sportscasters' vocabulary. List these words and what you think they mean by the way they are used. Check with your friends to see if they agree. Refer to the dictionary if necessary.

coverage _____

vintage _____

controversy _____

regimen _____

junket _____

ultimatum _____

tentative _____

physical _____

Questions.

Before the game

1. What kinds of exercises do each team do to warm-up? How do these exercises help athletes prepare for the game?

2. What do the sportscasters say about each team? Do they seem to favor one team over another? If so, why do you think they favor that team?

During the game

1. Describe the differences in behavior among the coaches on the sidelines. How can their behavior affect the game?

2. How will the outcome of the game affect the standing of each team's division?

3. What are the differences in the ways quarterbacks direct their teams? Which way seems most effective? Why?

4. Does one team have an advantage over the other? What is it? Are one team's players faster, stronger, smarter?

5. Does the officiating seem fair? What effects have the calls had on either team?

After the game

1. Who would you say was the most outstanding offensive player? Defensive player? Why?

2. Was there a turning point in the game? What do you feel was responsible for the shift in momentum?

3. Did playing conditions (fans, stadium, field, weather) seem to affect either team's performance? If so, how?

• **General Skill**—Reading to improve strategy and performance. *Purpose.* Certain circumstances during games and athletic events dictate planning and cooperation among coaches,

individual team members, or the group as a unit. Players and students can benefit markedly from reading to strengthen field or floor play. This additional reinforcement helps them fully understand precise strategies for use during crucial moments of competition.

Objectives. Upon completion of this activity students will:

1. Demonstrate their understanding and ability for using terminology related to various strategies that affect individual or team performance.
2. Answer questions that refer to crucial play situations and identify the most effective offensive or defensive adjustment.
3. Recognize a series of signs used to signal particular plays.

Material. A written explanation of a specific offensive or defensive strategy.

Procedure. The coach or physical educator discusses new words related to offensive or defensive tactics. Afterwards, players or students are given (either orally or in writing) several play situations and asked to describe the most effective counters to them. Later, coaches and players may decide on a system of body signals to trigger these maneuvers. Finally, players or students are tested on their ability to give these signs as well as "read" them.

Example. Baseball

Vocabulary (stealing):

scoring position	delayed double steal
passed ball	baffle
napping defense	hit and run
direct double steal	squeeze
break on the pitch	bunt

Steals are executed when relatively fast runners are on base, or when the catcher has trouble throwing to the bases. The runner may steal to get into *scoring position*, to get into position to score on a fly or *passed ball*, or to take advantage of a *napping defense*. He may make his *break on the pitch* or delay his break and go when the catcher returns the ball to the pitcher.

Occasionally two runners can advance on a *direct or delayed double steal.* There are many combinations of double steals, as you might well imagine.

Regardless of the skill of individual members of a team there must be teamwork for good strategy. In order for all to know just what is going on, signals are used. They should be easily seen and understood but clever enough to *baffle* the other team.

The coach and the team agree on a set of signals such as *steal, hit and run, squeeze,* and *bunt.* Body signals given by one of the coaches are the usual method. Examples of such signals are hands on hips (steal), arms folded across the chest (hit and run), left hand touching the right knee (squeeze), right hand touching the left ear (bunt).*

*Text from *Physical Education for High School Students.* Copyright 1970, pp. 68-69. Reprinted by permission of the American Alliance for Health, Physical Education and Recreation, Washington, D.C.

Vocabulary Check.

Choose a word or phrase from the preceding vocabulary list that best fits the following statements.

1. Two base runners make their break after the catcher returns the ball to the pitcher. _____
2. The failure on the part of a defense or offense to make an accurate adjustment to the opponent's strategy. _____
3. The opposing team's defense appears confused and incorrectly anticipates or "reads" a sign. _____
4. To gain a base without the aid of a hit, walk, or error. _____
5. Two base runners make a break as soon as the ball is pitched. _____
6. That which occurs when a base runner breaks for the next base as the pitcher starts to throw and the batter attempts to hit the ball regardless of whether the pitch is good. _____
7. Where the runner is when he occupies second or third base. _____

8. A play in which the batter attempts to score the runner from third base by bunting. _____
9. A pitched ball, not hit by the batter, that passes the catcher when he should have stopped it, and allows a base runner to advance. _____
10. To push or tap the baseball lightly without taking a full swing with the bat. _____

Questions. Identify which play is "on" according to the following situations. Demonstrate to the group the appropriate sign used to signal the strategy.

1. There's a man on first base. He makes a break as if to steal second just as the pitcher releases the ball. The second baseman moves to protect the runner's advance from first. The ball filters through the resulting hole for a hit. The man "stealing" second continues to third by virtue of his early start. _____
2. The score is tied in the bottom of the ninth inning. There is one out and a pretty fast runner is on first base. He makes a sudden break for second just as the catcher returns the ball to the pitcher. _____
3. Late in the game a run is needed badly. There is a man on third with one out. The runner goes with the pitch, and the batter attempts to bunt the ball regardless of whether the pitch is good. _____
4. There is one out in the top of the fifth inning and a man is on first. The batter "squares" around on the ball without actually swinging the bat. His purpose is to sacrifice himself but to advance the runner into scoring position.

_____

Supplementary Activity.

What other situations can you describe that require specific offensive or defensive adjustments? Which signals might be used to alert your team to their occurrence?

- **General Skill**—Reading to develop an understanding of extensive and technical vocabulary related to a particular sport or game.

Purpose. The sports world offers an abundance of reading experiences through which players and students may polish their language and thinking skills. In particular, articles related to sports celebrities are useful. Many youngsters will enthusiastically read and reread about their athletic "heroes" while they remain resistant toward other material. This provides coaches and physical education instructors an opportunity to not only advance players' or students' knowledge and understanding of sports but augment their general academic training as well.

Objectives. Upon completion of this activity students will:

1. Read to understand words of multiple-meanings (words whose meanings differ according to context).
2. Read to understand vocabulary related exclusively to a sport, game, or event.
3. Read to identify terms that refer to equipment and other factors of athletic performance.

Material. Any newspaper or magazine article that concerns a popular sports figure.

Procedure. The coach or physical educator presents players or students with an article to read and discusses reasons for reading this material. Purposes may include acquainting youngsters with outstanding performers in the sport or game; developing an awareness of different philosophical approaches toward competing in the field; adding to the students' vocabulary and general understanding of the activity itself; and elevating interest toward strong, healthy competition.

Group members are allowed ample time to read the feature and are asked to underline all the unknown vocabulary. They are encouraged to try and figure out meanings for these terms by using the words that come before and after them in the sentence. This is called using context clues to find meaning. If this is not helpful, they should look the words up in a dictionary or ask someone for assistance. Coaches and instructors should

develop several vocabulary exercises related to the article for discussion or written completion.

Example. Gymnastics (vocabulary development) article to be read: "Nadia Awed Ya" (Women's Olympic Competition), *Sports Illustrated*, August 2, 1976, 28-31.

The following serve as examples of how coaches and instructors might vary the format of sports vocabulary development exercises. While this activity relates solely to gymnastics, instructors might use these forms as models for creating similar practices in other sports, games, or events.

"One Picture is Worth..."

Directions. Look closely at the photographs accompanying this article. In a sentence or two, make up your own title caption and write it in the space provided. Example, Picture 1: The *balance beam* requires great *concentration* on the *part* of the gymnast. Which words have you used that mean something else in a different context? For example the term *balance* can refer to an instrument for weighing or to compute the difference between the debits and credits of an account; it may also mean to fluctuate or waver. *Beam* not only describes a long piece of heavy, squared timber but refers to a ray or shaft of light and means to smile with joy. *Concentration* and *part* also have several different meanings.

1. _____

   Multiple-meaning words _____

   Different meanings _____

   _____

   _____

2. _____

   Multiple-meaning words _____

Different meanings _____

_____

_____

3. _____

Multiple-meaning words _____

Different meanings _____

_____

_____

4. _____

Multiple-meaning words _____

Different meanings _____

_____

_____

"One Word is Worth..."

Directions. After reading the article go back and reread each of the underlined words as they appear in context. An unfamiliar word frequently can be defined by considering the words immediately before and after it. The dictionary or thesaurus may give more than one meaning for a given term. For each of the following words, circle the definition or synonym that comes closest to its meaning in the article.

1. *Flurry*
   agitate
   perturb
   bustle, whirlwind

2. *Faded*
   washed-out
   vanished
   tacky

3. *Nonplussed*
   confused
   overcome
   flustered
4. *Controversy*
   miff
   dispute
   altercation
5. *Principle*
   idea
   law
   rule
6. *Coterie*
   clique
   group
   mob
7. *Revamped*
   repaired
   revised
   overhauled
8. *Shamelessly*
   outrageously
   disgracefully
   overboldly
9. *Hype*
   attraction
   boost
   stimulant
10. *Premium*
    exceptional
    superior
    reward
11. *Comprehension*
    understanding
    apprehension
    envision
12. *Athleticism*
    "jock syndrome"
    addiction to athletics
    recreational
13. *Intellectual*
    superior
    egghead
    mental

Word Search

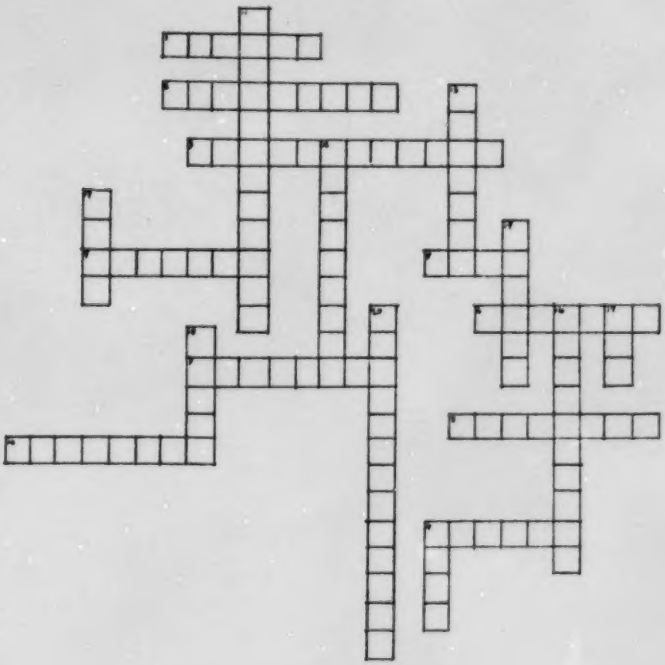
Directions. The puzzle below contains all the words listed, either up and down, diagonally, or across. Circle each word you find. Try to find all the words. Which of these terms mean something else in different contexts? Which relate specifically to gymnastics?

R M Q C S Z T E Y S H U E R T F L M
T E F P N C R N B P R A K S T A M S
A U L O X M I V U T I L A W R K E J
C S O T S A Q P H O A N P E H G T E
L E O T U R B L M C M D L F D Q I A
T V R A L F C I M Y O E Q U B U T L
U R E X O U O L G A L R J R L T R W
M O X H P E A U E K E O A I E N I K
J U E N R C C V O O G T P N O U T H
G T N S Q A H Y U M T H H G B O Z O
B I I S U T A R A P P A V S E M C R
A N L T C Z B Z M A P J R Y A S Y I
X E O T S V F W R S E O T D M I E Z
T B P S N I M U K A H G V E N D H O
T A M G E J T R Y O C P T A L X C N
N G A O V I U B R I P W D I K M P T
U N R J E E T S A D I I S F O T A A
O I T R N S E Q T C A R T W H E E L
M L B O U I M H G H K L O D Y L Z B
O B Y J E A D A S A J F G Q H L E A
R M D N U O R A L L A E L T S A O R
O U R S Q T F N P K X A P I R B A S
R T E B W M L E N R E T T O P S P E

Words. dismount, trampoline, spotter, Nadia, gymnast, all-around, ballet, coach, horizontal bars, routine, Olga, apparatus, judges, rings, horse, chalk, leotard, vault, cartwheel, Olympics, mats, mount, backflip, tumbling, unevens, floor-ex.

Cross Wits

Directions. After reading the article and reviewing the glossary of synonyms, complete the crossword puzzle below. First try supplying the word that fits by looking at the definition given under *Down* and *Across*. Afterwards you may refer to the article or glossary. The answers to the puzzle are shown.



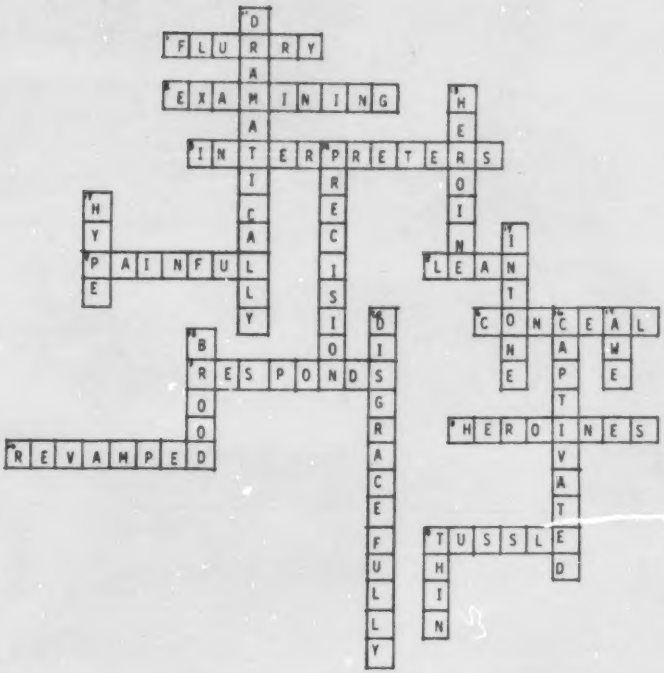
Across

1. Bustle, whirlwind
2. Observing, seeing
3. Explainers
4. Bitter, harsh
5. Thin
6. Hide
7. Reacts
8. Brave or famous women
9. Wrestle or tease
10. Revised

Down

11. Strikingly
12. Accuracy
13. Brave or famous person
14. Chant
15. Slang; to promote or sell
16. Charmed
17. Wonder, amazement
18. To sulk
19. Lacking fat
20. Shamelessly

Answers to Cross Wits



Across

1. Bustle, whirlwind
2. Observing, seeing
3. Explainers
4. Bitter, harsh
5. Thin
6. Hide
7. Reacts
8. Brave or famous women
9. Wrestle or tease
10. Revised

Down

11. Strikingly
12. Accuracy
13. Brave or famous person
14. Chant
15. Slang: to promote or sell
16. Charmed
17. Wonder, amazement
18. To sulk
19. Lacking fat
20. Shamelessly

Glossary of Synonyms

APPARATUS	Equipment
ATHLETICISM	Addiction to athletics
BEGUILING	Crafty, complex, hard to figure out
BROOD	Dwell on a thought, sulk
CAPTIVATED	Charmed, fascinated
COMPREHENSION	Understanding
CONCEAL	Hide
CONTROVERSY	Dispute
COTERIE	Group of people united in one cause
DRAMATICALLY	Strikingly
EXAMINING	Observing, seeing
EXPRESSIVE	Showing feeling
FADED	Vanished
FANFARE	Publicity
FIVEFOLD	Five times as many or as great
FLURRY	Bustle, whirlwind
HEROINE	Brave or famous person
HYPE	To sell or promote
INTONE	Say or utter something in a particular tone of voice, chant
INTELLECTUAL	High mental ability
INTERPRETERS	Explainers
INTRIGUING	Amusing, fascinating
LEAN	Thin
MAGNIFIES	Increases in size
MELODRAMATIC	Exaggerated, overacting
NONPLUSSED	Confused
PAINFUL	Bitter, harsh
PRECISION	Accuracy
PREMIUM	Reward
PRINCIPLE	Idea
RECOGNIZE	To know something or someone
RESPONDS	Reacts

REVAMPED	Revised
SHAMELESSLY	Disgracefully
SPECTACULAR	Daring, thrilling, making a great display
STYLIZED	Orderly, conforming to a particular style
TUSSLE	Wrestle or tease

The Match Game

Directions. After reading the assigned article and studying the glossary of synonyms, match the terms in the first column with the words they define in the second column. Place the letter in the space provided before each proper definition.

_____ To know something, someone	a. Intone
_____ Daring, thrilling	b. Apparatus
_____ Say or utter something in a particular tone of voice	c. Fivefold
_____ Increases in size	d. Melodramatic
_____ Orderly	e. Stylized
_____ Showing feeling	f. Recognize
_____ Publicity	g. Spectacular
_____ Five times as much	h. Magnifies
_____ Equipment	i. Expressive
_____ Exaggerated, overacting	j. Fanfare

Acrostics Are Fun

Directions. Scan the entire article and fill in the blanks beside the letters G-Y-M-N-A-S-T-I-C-S with an unfamiliar word you discover in your reading. For example, you might fill in the first blank beside the letter G with the word *grace*, which appears toward the end of the feature. After you list a word for each letter, write in the dictionary definition of the new word.

LETTER	WORD	DEFINITION
G		
Y		
M		
N		
A		
S		
T		
I		
C		
S		

"Who's Who in..." (Gymnastics)

Directions. Choose one of the gymnasts listed below, or select your personal favorite, and read an article related to him/her. Prepare a discussion or a one-page report on the person. See how many of the vocabulary words you've encountered in the previously assigned article and exercises can be incorporated into your "feature" story.

Cathy Rigby
Olga Korbut
Marie Fillatova
Ludmilla Tourischeva
Nelli Kim
Linda Kardos
Bart Konner
Kurt Thomas
Stephanie Willims
Svetlana Grosdova
Merilyn Chapman
Nicolai Andrianov
Donna Turnbow
Mitsuo Tsukahara

• **General Skill**—Reading to understand official signals during play. This activity is designed for players and spectators.

Purpose. Most sporting events employ referees, judges, umpires, or officials to control the game and arbitrate various infractions of rules, time-outs, and scoring situations. These officials generally signal their rulings to the spectators and players, using gestures of the hands, arms, legs, or body. Players and spectators can improve their understanding of the game and better appreciate the action by learning to "read" these calls swiftly and accurately.

Objectives. Upon completion of this activity, players or spectators will:

1. Relate specific vocabulary to various signals made by sports officials.
2. Answer questions based on pictorial representations of these signs.
3. Draw a "stick figure" picture of an official's movements to indicate an infraction, time-out, or score when given a spoken or written summary of each signal.

Material. Pictures of officials' signals or "calls" for a particular sport or game.

Procedure. Coaches or instructors work with players and spectators to help them define terminology related to various official signals. They demonstrate or describe for the group what constitutes the infraction of rules, time-out, and scoring situation. Afterwards, players and spectators are asked to answer questions based on these signs. This may be carried out through discussion or using paper and pencil. Finally, the coach or instructor reads a description of each playing incident for which an official may have a specific signal, and asks players or spectators to draw stick figure illustrations of these signs.

Activity. Touch Football (National Federation Football Officials' Signals).

Vocabulary:

offsides	roughing the kicker
free-kick	intentional grounding
illegal motion	illegal use of hand or arm
clipping	unsportsmanlike conduct

Matching directions. Match the item in column B with the official call in column A.

Column A	Column B
1. free-kick	a. running into or making illegal contact with the punter or kicker
2. clipping	b. a player who "jumps" or moves before the ball is snapped from center
3. illegal motion	c. swearing or fighting during play
4. roughing the kicker	d. to block an opposing player, other than the ball carrier, by hitting with the body from behind
5. illegal use of hand or arm	e. movement in the offensive backfield before the ball is snapped to the center
6. off sides	f. after a safety has been assessed against a team, the latter has an option to return the ball by punting it or kicking from the tee
7. intentional grounding	g. the quarterback throws the ball "away"
8. unsportsmanlike conduct	h. using the heel of the hand or striking with the forearm

In the spaces provided below write a description of how each of the following might occur during play:

1. Safety _____

_____

2. Illegal forward pass _____

_____

3. Ineligible receiver _____

_____

4. Touchdown _____

_____

5. Interference _____

_____

6. Personal foul _____

_____

7. Delay of game _____

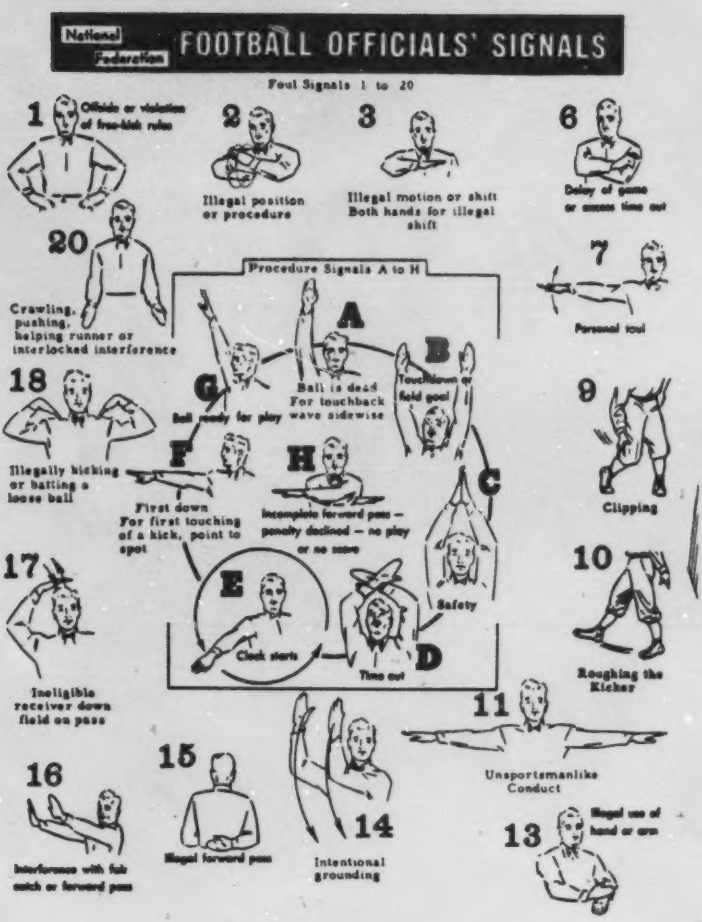
_____

8. First down _____

_____

Directions. After listening to the coach or instructor describe a play situation (an infraction, time out, score) draw a stick figure picture of the official's signal in the space below. (See diagram of football officials' signals.)

1.	14.	D.
2.	15.	E.
3.	16.	F.
6.	17.	G.
7.	18.	H.
9.	20.	
10.	A.	
11.	B.	
13.	C.	



Reprinted from *Physical Education for High School Students*, copyright 1955, p. 273. By permission of the American Alliance for Health, Physical Education and Recreation, Washington, D.C.

Supplementary Activity.

Directions. In each of the blank spaces below write a description or identify the official signal for each of the illustrations shown.

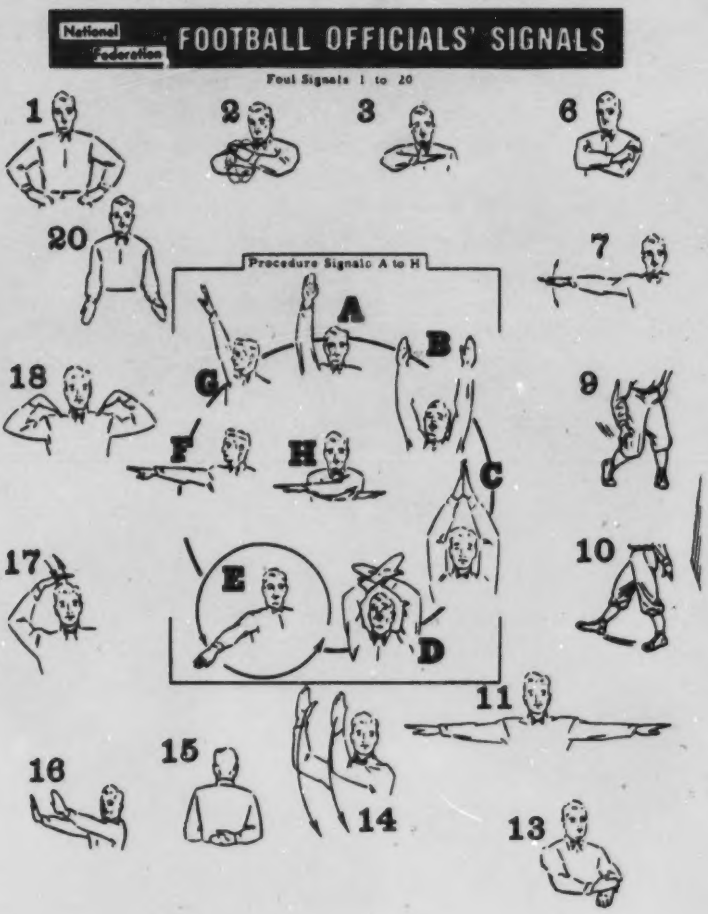
1. _____
2. _____
3. _____
6. _____
7. _____
9. _____
10. _____
11. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
20. _____

Procedure Signals

A. _____
B. _____
C. _____
D. _____
E. _____
F. _____

G. _____

H. _____



Reprinted by permission of the American Alliance for Health, Physical Education, and Recreation, Washington, D.C.

• **General Skill**—Reading activities for physical education classes.

Activity 1. Reading to warm-up for play.

Purpose. In physical education, students should be able to demonstrate reading skills which advance or support athletic performance. Some drills require understanding basic vocabulary as well as terminology related to body movement. Therefore, students must be able to read instructions for an activity and perform the movement.

Objectives. Upon completing this activity, the student will be able to read to:

1. Understand and cope with basic or technical terms.
2. Relate a word to a body movement.
3. Follow directions.

Materials. Regular PE class attire, chalkboard, chairs.

Procedure. Students will read chalkboard out loud and together. After each activity, terminology will be discussed and questions answered.

slide	length	bear walk
width	center circle	attempt
cartwheel		

Students will be instructed to begin at the same time.

Do these exercises in order (these are listed on chalkboard):

1. Touch four different doors.
2. Carry a folding chair to the center circle and back.
3. Slide the length of the gym floor.
4. Do fifteen sit ups.
5. Bear walk the width of the gym.
6. Jump off the stage three times and touch toes in the air.
7. Attempt four cartwheels.

As soon as you finish, sit on the cement edge.

Examples of questions students may ask concerning the reading assignment:

1. "Touch four different doors."
   Do double doors count as two? Yes.

2. "Carry a folding chair to the center circle and back."
   Do you have to return it to the same position? Yes! Don't drag the chair.
3. "Slide the length of the gym floor."
   How do you slide? Slide as in a dance step. Step-drag, now you try it.
   What does length of the floor mean? Length is the longest dimension of the gym floor.
4. "Do fifteen sit ups."
   Do we have to have hands behind our heads? Yes. Knees bent? Yes.
5. "Bear walk the width of the gym."
   Do we have to go all the way up and down the floor? No. Bear walk is on hands and feet, not knees. Width is the shorter dimension of the floor.
6. "Jump off the stage three times and touch toes in the air."
   If you don't touch your toes, does it still count? Yes. Careful on your landing; bend your knees. (Use only with heavy mats to avoid possible injury.)
7. "Attempt four cartwheels."
   What's meant by attempt? Many of you can't do a perfect cartwheel but you still get credit for trying! Use a line on the floor to help you get hands and feet down in a straight line.

"Remember, you have not finished until you're sitting on the cement edge. On your mark, get set, GO!"

Activity 2. Reading to understand physiological effects of aerobic exercise.

Purpose. An abundance of evidence suggests people who perform regular aerobic exercise (those activities that require work from the heart and lungs) suffer less cardiovascular diseases than individuals leading sedentary, inactive lives. Players and students can learn the value of these training methods to develop or maintain high levels of health and physical fitness.

Objectives. Upon completion of this exercise students will:

1. Identify terms related to cardiovascular and cardiorespiratory functions.
2. Understand basic research techniques in physical education.

Materials. Students' watches (with sweep-second hand) or stop watches, pencils, and paper.

Procedure. After discussing the vocabulary listed, the instructor groups the class into pairs of students. Each pair receives a watch, paper, and pencil. The instructor demonstrates correct method for measuring the heart's pulse rate by locating the beat in the wrist or jugular vein. Students practice locating and measuring one another's pulse rates. When they are sure they can do this accurately, each student measures and records another's heartbeat:

1. At rest.
2. After two minutes of running in place.
3. Two minutes after the student stops running in place. (This is to determine the rate at which the heart achieves its normal pace.)

Each student will record the other's three scores on a piece of paper. Once all the data have been collected and recorded for every student, the instructor asks each student to write his/her name on a slip of paper. These names are picked up and placed in a hat. The instructor withdraws half of these slips of paper reading each name aloud. This first group of students will comprise the experimental segment of a simple research study. They are asked to walk or run, depending on their level of physical fitness, two miles each day for a period of three weeks. The other half of the class is asked to limit its physical activity for this period of time to games that do not impose stress on the heart and lungs (bowling, archery, golf, pool, shuffleboard).

After the three week period, the instructor repeats the procedure of asking each student to measure and record the other's three pulse rates. Once these figures have been registered, the instructor asks students to compare each other's pre- and posttest results. The instructor discusses with the class

any observable differences in the data and the assumptions or conclusions which may be drawn from the study.

Example. Walking or Running

Vocabulary (Aerobics)	*(Research)*
aerobic exercise and anaerobic exercise	random sample
cardiovascular activity	experimental group
cardiorespiratory activity	control group
sedentary activity	population
pulmonary artery	data
stamina	average
recovery time	research
oxygen debt	correlation
capillary system	assumptions and conclusions
cholesterol	
arteriosclerosis	

Data recording sheet

	Experimental Group	Control Group
Pulse	Bobby Long	Richard Smith
At rest	first trial 92	first trial 80
	second trial 85	second trial 80
2 min. run in place	first trial 145	first trial 140
	second trial 135	second trial 140
2 min. recovery	first trial 115	first trial 90
	second trial 100	second trial 90

Supplementary readings.

Cooper, K. *Aerobics.* New York: Evans, 1968.

Sheehan, G. *Running and Being.* New York: Simon and Shuster, 1978.

Fixx, J. *The Complete Book of Running.* New York: Random House, 1977.

Activity 3. Reading in an area of nutrition and food processing.

Purpose. Many young people have little or no understanding of food value and the nutritional aspects of processed foods. This activity promotes awareness in these areas and provides students with an understanding of a packaged foodstuff's ingredient worth.

Objectives. Upon completion of this exercise students will:

1. Understand and use basic vocabulary related to nutrition and food processing.
2. Create a packaged food product label listing the name of the company, the item, supplements, ingredients, weight, directions for using the product, nutritional information, etc.

Materials. Labels from commercially canned, bottled, or packaged goods; paper and pencils.

Procedure. The instructor assigns students some selective readings from the resources list.

Afterwards, students join each other in a discussion of the following vocabulary:

daily minimum requirement	proteins
carbohydrates	starch
soluble/insoluble fats	minerals
roughage (fibre)	sodium nitrite
energy	sodium nitrate
vitamins	bht
amino acids	preservatives
botulism	carcinogens

After the discussion, students are given sample labels from which they describe various features of a packaged food

product. Those items that are unfamiliar or cause confusion for the students may be clarified by the instructor, class members, or referral to some of the accompanying resource reading material.

Next, the instructor asks each student to create a complete label for a packaged foodstuff. As a follow-up activity, students must "sell" their products to the class. They should be able to describe the value or advantage of buying the particular item.

Reading resources.

Fryer, L., and Annette Dickinson. *A Dictionary of Food Supplements*. New York: Mason/Charter, 1975 (10-12).

Deutsch, R. *The Family Guide to Better Food and Better Health*. Des Moines: Creative Home Library/Meredith Corporation, 1971 (12).

Pipes, George M. *First Foods*. Englewood Cliffs, New Jersey: Prentice-Hall, 1973 (6).

Ross, Joyce. *How to Plan and Prepare Meals*. Philadelphia: J.B. Lippincott, 1968 (8).

Codes of Federal Regulations, Food Facts, and Fun with "Butter and Boop." Washington, D.C.: Black Light (comic), 1972 (7).

Activity 4. Reading to understand and appreciate dancing as an expression of movement, form, and physical fitness.

Purpose. Dancing can provide students sound aerobic exercise and it makes great demands on an individual's balance, concentration, and coordination. This activity helps young people understand and appreciate the elements of dance related to sports and physical education.

Objectives. Upon completion of this activity students will:

1. Understand and identify various terms related to dance movements using three categories (*space, force, time*).
2. Understand and perform dance steps to various rhythms.
3. Read and interpret a piece of poetry using specific dance steps and movements that express the poet's feelings.

Materials. Recordings of various musical rhythms, record player, and poems expressing different moods and themes.

Procedure. The instructor and students discuss the three categories of movement: *space* (refers to the direction, level, and focus in dance), *force* (refers to the energy affecting movement), *time* (refers to the rhythm or underlying beat). This discussion also includes the following vocabulary terms:

accent	level	rhythm
collapse	measure	sixteenth
direction	meter	suspended
eighth	pendular	sustain d
focus	percussive	tempo
grouping	quarter	vibratory

The instructor writes the three categories on a chalkboard and asks the class to position each term under the correct category.

Space *Force* *Time*

Afterwards, the instructor demonstrates various dance steps performed to musical recordings, allowing students to practice each set of movements. (Some of these dance variations might include Disco, Ragtime, Rock and Roll, Foxtrot, Boogie Woogie, Waltz, Mambo, Polka, Charleston.)

As a concluding exercise, students are asked to select a poem from the instructor's collection, study it, and interpret its feeling using any of the movements from the various dance steps learned in class. The group is asked to describe the poet's mood based on the dancer's rendition.

Supplementary Activities. Students are asked to demonstrate and discuss the various dance movements and form developed by athletes in the following sports:

Basketball	Football
Baseball	Hockey
Boxing	Wrestling

Tennis	Golf
Track and Field Events	Bowling
Gynmastics	Diving
Weight Lifting	

Students and the instructor discuss the following statement from Michener's *Sports in America* (*8*:80):

> If I had a daughter or son determined to be a writer—and by that I mean poet, dramatist, novelist, or advertising writer—naturally I'd expect them to be competent in their own language and to know something about psychology and the history of what fine writers have accomplished in the past. But the two courses I'd make obligatory would be one in ceramics so that you could feel form emerging from inchoate clay. I think this is very important that you have a feeling for form and how it is achieved.
>
> And the second course would be eurhythmic dancing, so that you could feel within you own body the capacity you have for movement, form, and dramatic shifts in perspective. Of course, if you can't locate a class in such dancing, you might pick up the same sensations in a long game of basketball or tennis, where the ebb and flow of movement is pronounced. Or perhaps in any other sport requiring bold shifts of movement. What the artist requires is a sense of emerging form, a kinesthetic sense of what the human body is capable of. If you marry these sensory characteristics to a first-rate brain, you have a good chance of becoming an artist.

Activity 5. Reading to improve study techniques in sports and physical education.

Purpose. Many students have not learned to read for study purposes. This activity introduces youngsters to the SQ_3R technique and shows them how to apply these skills when reading their assignments for class. (SQ_3R is a reading/studying method developed by Francis P. Robinson at Ohio State University during the Second World War. It was designed to assist servicemen in reading their training manuals and proved so effective it has become a standard procedure for teaching students of every description ways to improve their reading.)

Objective. Upon completion of this activity students will:

Understand and be able to apply the SQ_3R technique to classroom reading assignments.

Materials. Physical education text, health pamphlet, or sports article from the newspaper.

Procedure. The instructor presents the SQ_3R technique to students, demonstrating and emphasizing its advantages. Each section of this method is given detailed attention. The instructor may wish to use several different kinds of reading materials (physical education textbook chapter, health pamphlet, sports article from the newspaper). Students are then asked to apply this system. The complete approach appears on the following pages.

Follow up. The instructor allows students opportunities to practice SQ_3R and clarifies any questions which may arise during these periods. Afterwards, s/he discusses the following questions with students citing advantages for the improvement of reading/study skills in each case.

1. Do you skim material before reading it in detail?
2. Do you summarize the selection after reading it?
3. Do you raise questions while reading and then read to find the answers?
4. Do you note key statements in your text during study?
5. Do you review the previous assignment before you read the current one?
6. When you study, do you read as rapidly and as carefully as you can?
7. Do you plan a flexible study schedule in advance and adhere to its main features?
8. Do you immediately reread sections of your assignment which are not clear?
9. Are you careful not to skip graphs, tables, and charts when reading an assignment?
10. Do you take notes of key ideas after you read each section?

The Survey Q_3R Method of Study*

The title for this new higher-level study skill is abbreviated in the current fashion to make it easier to remember and to make reference to it simpler. The symbols stand for the steps which the student follows in using the methods; a description of each of these steps is given.

SURVEY	1. *Glance over the headings in the chapter to see the few big points which will be developed.* This survey should not take more than a minute and will show the three to six core ideas around which the rest of the discussion will cluster. If the chapter has a final summary paragraph this also will list the ideas developed in the chapter. This orientation will help you organize the ideas as you read them later.
QUESTION	2. Now begin to work. *Turn the first heading into a question.* This will arouse your curiosity and so increase comprehension. It will bring to mind information already known, thus helping you to understand that section more quickly. And the question will make important points stand out while the explanatory detail is recognized as such. This turning a heading into a question can be done on the instant of reading the heading, but it demands a conscious effort on the part of the reader to make this query for which he must read to find the answer.
READ	3. *Read to answer that question,* i.e., to the end of the first headed section. This is not a passive plowing along each line, but an active search for the answer.
RECITE	4. Having read the first section, look away from the book and try briefly to recite the answer to your question. Use your own words and name an example. If you can do this, you know what is in the book; if you can't, glance over the section again. An excellent way to do this reciting from memory is to jot down cue phrases in outline form on a sheet of paper. Make these notes very brief. Now, repeat steps 2, 3, and 4 on each succeeding headed section. That is, turn the next heading into a question. Read to answer that question, and recite the answer by jotting down cue phrases in your outline. Read in this way until the entire lesson is completed.
REVIEW	5. When the lesson has thus been read through, look over your notes to get a bird's-eye view of the points and of their relationships and check your memory as to the content by reciting on the major subpoints under each heading. This checking of memory can be done by covering up the notes and trying to recall the main points. Then expose each major point and try to recall the subpoints listed under it.

•Robinson, Francis P. *Effective Study*. Third Edition. New York: Harper and Brothers, 1960.

Chapter Four

Evaluating Grade Levels of Difficulty for Reading Materials

Textbooks or Supplementary Materials

Using the Fry Readability Graph shown, a coach or instructor can estimate approximate grade levels of difficulty for assigned texts or other reading materials employed in these areas. The graph will aid in identifying materials that are more consistent with readers' abilities in middle, intermediate, and secondary schools.

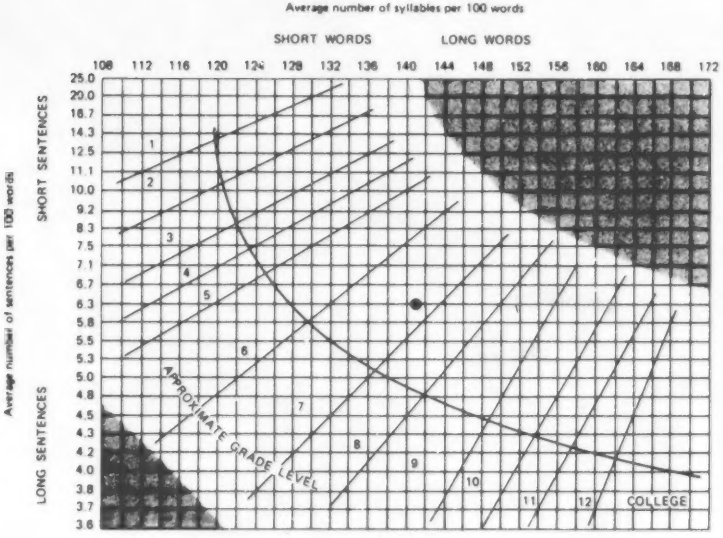
However, it is worth emphasizing that *approximate* levels of reading difficulty are established through the use of readability formulas. Most of these systems rely heavily on syllable count and the number of sentences per passage as a means of determining how hard something may be for a particular age student to read. There are many more factors involved in making these judgments. The following list provides some additional features of written material that cause it to be more or less difficult to read but are very seldom given ample consideration by those who compile the standards for measuring reading difficulty.

1. Word length.
2. Percentage of different words.
3. Sentence length.
4. Personal references.
5. Number of difficult words according to word lists.
6. Density and unusualness of the facts.
7. Interrelationship of ideas.
8. Organization of the material.
9. Concept load—abstractness of the words.
10. Interest and purpose of the reader.

At best, these graphs offer a thumbnail sketch of whether a certain book could be read and understood by students who appear to be reading within a given range; at worst, the graphs oversimplify the process of evaluating reading difficulty and may underestimate or overestimate the appropriateness of using specific materials.

GRAPH FOR ESTIMATING READABILITY

by Edward Fry, Rutgers University Reading Center, New Jersey



Directions for Working Readability Graph

1. Randomly select three sample passages and count out exactly 100 words beginning with a beginning of a sentence. Don't count numbers. Do count proper nouns.
2. Count the number of sentences in the hundred words estimating length of the fraction of the last sentence to the nearest 1/10th.
3. Count the total number of syllables in the 100-word passage. If you don't have a hand counter available, an easy way is to simply put a mark above every syllable over one in each word, then when you get to the end of the passage, count the number of marks and add 100.
4. Enter graph with average sentence length and number of syllables; plot dot where the two lines intersect. Area where dot is plotted will give you the approximate grade level.
5. If a great deal of variability is found, putting more sample counts into the average is desirable.

Reproduction permitted—no copyright

Chapter Five

Coaches and Physical Educators as Models of Literacy

Generally, coaches and physical educators have commanded great respect among players and students. It is not uncommon to find many youngsters voting for them as favorite teachers. This role provides these professionals a unique position and opportunity to influence the behavior of youth. Coleman (*2*:103) discussed the powerful effects of modeling:

> Such identifications, particularly in the form of "hero worship," may play an important role in shaping the personality development of a child who strives to be like his hero in dress and manner. He shapes his own values after those of his hero.

Many youngsters assign value and meaning to a topic of study by virtue of *who* teaches it rather than to any inherent quality of the specific subject matter. Coaches and physical educators who emphasize the need to read, underscore literacy or academic as well as athletic achievement, and read themselves, influence players and students toward these endeavors. By making reading an integral part of athletic development or stressing the virtues of thought and performance, educators working in these areas help to show young people that using their heads in conjunction with their bodies is a worthwhile pursuit

and is extremely significant for happy, healthy, and wholesome living.

A Final Word

The present surge of interest in sports and physical fitness throughout the country is not confined to males. Women of all ages are being lured to arenas, pools, jogging lanes, and gymnasiums by Title IX of the Educational Amendments Act (1972). Their record of participation in athletics was reported in *Time* (*11*):

- Eight years ago, fewer than 300,000 high school girls participated in interscholastic sports. This year the number will be close to 2 million—nearly a sevenfold increase.
- The Association for Intercollegiate Athletics for Women (AIAW) formed just seven years ago, today has 825 active member schools—more than its male counterpart, the National Collegiate Athletic Association (NCAA). Well over 100,000 women now take part in intercollegiate sports. The figure for men is 170,000.
- The AIAW first allowed athletic scholarships in 1973. Last year some 10,000 girls from over 400 schools received such grants, worth at least $7 million.
- In 1972, the first all women's mini-marathon in New York's Central Park drew 78 entries. Last May, 4,360 competitors entered the race.

Because of the tremendous interest most youngsters bring to sports and physical education, natural provision is made through meaningful reading experiences for coaches and teachers to accommodate a student's vitality, inquisitiveness, desire for recognition, need for competence and a positive self-image, and passion for play or competition. In the area of athletics, "the right material, for the right pupil, at the right time," may symbolize more than a cliche.

The genuinely strong contribution sports and physical education can make, as a basis of practice and preparation for reading in all academic areas, lies in the bed of motivation and interest many young people harbor for the world of athletics. These factors often become the propellants that start and keep most students reading. The unavoidable truth—which frequently gets obscured or buried by curriculum guides, course syllabi, assigned textbooks, and required reading lists—is *pupils will*

never achieve broad reading maturity and competency until they want to read. Dechant (*3*) said, "Interests are the active forces that direct our attention to activities or objects. They determine whether the student will read, how much he will read, and in what area he will read."

The essence of most reading difficulties in school may be attributed to students' poor mental attitudes which spring from the absence of motivation or interest for a particular subject. Furthermore, this prevalent disinterest forms the root of many youngsters' failure to acquire critical reading abilities which equip them for general academic success. Yutang (*12*:379) summarized these points:

> A teacher cannot force his pupils to like what he likes in reading, and if the reader has no taste for what he reads, all the time is wasted. There are no books in this world that everybody must read, but only books that a person must read at a certain time in a given place under given circumstances and at a given period of his life.

Making sense out of reading is the key to promoting lifelong learning habits that lead to intellectual, emotional, and spiritual growth. Through sports and physical education, coaches and teachers have special academic vehicles with which they can help make reading a significant venture and utilize students' intense desires to improve sports knowledge and performance as the foundation for numerous real-life reading and thinking activities.

References

1. American Association for Health, Physical Education, and Recreation. *Physical Education for High School Students*. Washington, D.C., 1955, 1970.
2. Coleman, James C. *Abnormal Psychology and Modern Life*. Glenview, Illinois: Scott, Foresman, 1964, 103.
3. Dechant, Emerald V. *Improving the Teaching of Reading*. Englewood Cliffs, New Jersey: Prentice-Hall, 1970, 99.
4. Hafner, Lawrence E. *Improving Reading in Middle and Secondary Schools*. New York: Macmillan, 1970, 39.
5. Herber, Harold L. *Teaching Reading in Content Areas*. Englewood Cliffs, New Jersey: Prentice-Hall, 1978, 3.

6. Kingman, Lee. *Head Over Wheels*. New York: Houghton Mifflin, 1978.
7. Malcolm X and Alex Haley. *The Autobiography of Malcolm X*. New York: Ballantine Books, 1965, 179.
8. Michener, James. *Sports in America*. New York: Random House, 1976, 80.
9. Stanchfield, Jo M. "Boys' Achievement in Reading," *Reading and Inquiry*. Newark, Delaware: International Reading Association, 1965, 290-293.
10. Thoreau, Henry David. *Walden and Other Writings*. New York: Bantam Books, 1962, 180.
11. *Time Magazine*. "Here Come the Girls," June 26, 1978.
12. Yutang, Lin. *The Importance of Living*. New York: Capricorn Books, 1937, 379.
13. Zintz, Miles V. *The Reading Process*. Dubuque, Iowa: William C. Brown, 1970, 424.

Appendix

BIBLIOGRAPHY FOR SPORTS AND PHYSICAL EDUCATION

Extensive bibliography with grade level reading difficulty of sports literature, divided into specific categories

• General

TRADE BOOKS

Bach, Alice. *The Meat in the Sandwich.* New York: Dell. (Gr. 5+)

Butler, Hal. *Sports Heroes Who Wouldn't Quit.* New York: Messner, Julian, 1973. (Gr. 7+)

Carson, John F. *The Coach Nobody Liked.* New York: Farrar, Straus, and Giroux, Ariel Books, 1960. (Gr. 7-9)

Gelman, Steve. *Young Olympic Champions.* New York: Scholastic, 1969. (Gr. 4-6)

Gifford, Frank, with Charles Mangel. *Gifford On Courage.* New York: Bantam. (Gr. 7+)

Herzberg, Max J. *Treasure Chest of Sports Stories.* New York: Messner, Julian, 1951. (Gr. 7+)

Hewman, William. *Famous American Athletes.* New York: Dodd Mead, 1963. (Gr. 7-9)

Hollander, Zander. *Great American Athletes of the Twentieth Century.* New York: Random House, 1966. (Gr. 5-9)

Jacobs, Karen F. *Girl Sports!* New York: Bantam, 1979. (Gr. 4+)
Jacobs, Linda Ann. *Queen of the Mountain.* St. Paul, Minnesota: EMC Corporation, 1969. (Gr. 4-6)
Joan Moore Rice. *The Olympic Dream.* (Gr. 4-6)
Mary Decker. *Speed Records and Spaghetti.* (Gr. 4-6)
Robin Campbell. *Joy in the Morning.* (Gr. 4-6)
Robyn Smith. *In Silks.* (Gr. 4-6)
Rosemary Casals. *The Rebel Rosebud.* (Gr. 4-6)
Katz, Fred. *American Sports Heroes of Today.* New York: Random House, 1970. (Gr. 5-9)
Kirschner, Allen. *Great Sports Reporting.* New York: Dell, 1979. (Gr. 6+)
Larder, Rex. *Rex Larder Selects the Best of Sports Fiction.* New York: Grosset and Dunlap, 1966 (Gr. 10-12)
Liss, Howard. *The Giant Book of Strange but True Sports Stories.* New York: Random House, 1976. (Gr. 5-9)
Lorimer, Lawrence T. *Breaking In.* New York: Random House, 1974. (Gr. 5-7)
Morse, Charles. *Peggy Fleming.* Mankato, Minnesota: Creative Education, 1974. (Gr. 3-6)
Pretner, Lee. *Pro Sports Trivia.* New York: Franklin Watts, 1975. (Gr. 4+)
Redding, William J. *The Lincoln Library of Today's Sports Champions.* Columbus, Ohio: Frontier Press, 1973. (Gr. 7-9)
Sabin, Francine. *Women Who Win.* New York: Dell, 1979. (Gr. 5+)
Stambler, Irwin. *Speed Kings: World's Fastest Humans.* New York: Doubleday, 1973. (Gr. 7-9)
Warner, Gary. *Home Team Wears White.* Grand Rapids, Michigan: Zondervan, 1969. (Gr. 7+)

MAGAZINES

Athletic Training (1956), Q $7. National Athletic Trainers Association, 3315 South Street, Lafayette, Indiana 47904.
Black Sports, M $6/year. Allan P. Barron Publications, 386 Park Avenue, New York, New York 10016.
Letterman, 8 times/year, free to high schools and libraries. Letterman Publications, Box 804, Wheaton, Illinois 60187.
Popular Sports, $1.25. CBS Publications, 1515 Broadway, New York, New York 10036.
Sport, $6/year. MacFadden-Bartell Corporation, 153-01 Tenth Avenue, Whitestone, New York 11357.
The Sporting News, $12.75/year. Box 56, St. Louis, Missouri 63166.
Sports Eye, $1.75. Sports Eye, Great Neck, New York 11021.
Sports Illustrated, $8.50/year. Time and Life Building, Rockefeller Center, New York, New York 10020.
Super Sports, $1. Reese Publishing, 235 Park Avenue South, New York, New York 10003.

• Baseball

TRADE BOOKS

Allen, Ethan. *Batting and Bunting*. School Book Service. (Gr. 7-12)

Allen, Ethan, and Tyler Micoleau. *Baseball Techniques Illustrated*. New York: Ronald Press, 1951. (Gr. 7+)

Allen, Lee. *Dizzy Dean: His Story in Baseball*. New York: Putnam, 1967 (Gr. 6+)

Archibald, Joe. *Baseball Talk for Beginners*. New York: Messner, 1969. (Gr. 4+)

Archibald, Joe. *The Fifth Base*. Macrae Smith, 1973. (Gr. 7+)

Bisher, Furman. *Strange but True Baseball Stories*. New York: Random House, 1966. (Gr. 6-8)

Campanella, Roy. *It's Good to Be Alive*. Boston: Little, Brown, 1959. (Gr. 8+)

Carol, Bill, Jr. *Single to Center*. Austin, Texas: Steck-Vaughn, 1974. (Gr. 4-6)

Cohen, Barbara. *Thank You, Jackie Robinson*. New York: Lothrop, Lee, and Shepard, 1974. (Gr. 5-8)

Cook, Joseph J. *Famous Firsts in Baseball*. New York: Putnam, 1971. (Gr. 7+)

Decker, Duane Walter. *The Grand-Slam Kid*. New York: Morrow, 1964. (Gr. 7-9)

Devaney, John. *Juan Marichal, Mister Strike*. New York: Putnam, 1970. (Gr. 6+)

Durant, John. *Highlights of the World Series*. New York: Hastings House, 1973. (Gr. 7+)

Durant, John. *The Story of Baseball in Words and Pictures*. New York: Hastings House, 1973. (Gr. 5-9)

Freeman, S.H. *Basic Baseball Strategy*. New York: Doubleday, 1965. (Gr. 4-6)

Gutman, Bill. *Hank Aaron*. New York: Grosset, 1973. (Gr. 3-5)

Harmon, A.W. *Base Hit*. Philadelphia: J.B. Lippincott, 1970. (Gr. 9-12)

Harrelson, Bud. *How to Play Better Baseball*. New York: Antheneum, 1972. (Gr. 7+)

Jackson, Caary Paul. *Bud Banker, High School Pitcher*. New York: Hastings House, 1967. (Gr. 7-9)

Kahn, Roger. *The Boys of Summer*. New York: Harper and Row, 1972. (Gr. 7-12)

Kalb, Jonah. *The Goof that Won the Pennant*. Boston: Houghton Mifflin, 1976. (Gr. 4-6)

LaAllen, Hill, and Wang. *The American League Story*. New York: Macmillan, 1965. (Gr. 7-12)

Liss, Howard. *Baseball's Zaniest Stars*. New York: Random House, 1971. (Gr. 7-9)

Lord, Beman. *Bats and Balls*. New York: Henry Z. Walck, 1962. (Gr. 3-6)

Luce, Willard, and Celia Luce. *Lou Gehrig: Iron Man of Baseball*. Champaign, Illinois: Garrard, 1970. (Gr. 3-5)

Richards, Kenneth G. *Babe Ruth*. New York: Children's Press, 1967. (Gr. 7+)

Robinson, John R. *Jackie Robinson's Little League Baseball Book*. Englewood Cliffs, New Jersey: Prentice-Hall, 1972. (Gr. 4-7)

Robinson, John R., and Alfred Ducket. *Breakthrough to the Big League: The Story of Jackie Robinson*. New York: Harper and Row, 1965. (Gr. 5+)
Schoor, Gene. *Roy Campanella, Man of Courage*. New York: Putnam, 1959. (Gr. 6-9)
Slote, Alfred. *My Father, the Coach*. Philadelphia: J.B. Lippincott, 1972. (Gr. 6-9)
Slote, Alfred. *Stranger on the Ball Club*. New York: Dell, 1970. (Gr. 6-9)
Taves, Isabella. *Not Bad for a Girl*. New York: M. Evans, 1972. (Gr. 4-7)
Walker, Henry. *Illustrated Baseball Dictionary for Young People*. New York: Harvey House, 1970. (Gr. 5-8)
Wayne, Bennett (Ed.). *Big League Pitchers and Catchers*. Champaign, Illinois: Garrard, 1974. (Gr. 5-12)

EASY READING

Kessler, Leonard. *Here Comes the Strikeout*. New York: Harper and Row, 1965. (Gr. 1-3)
Renick, Marion. *Boy at Bat*. New York: Scribner, 1961. (Gr. 3-4)

MAGAZINES

Baseball (1977), M $1.25. Maco Publishing Company, 380 Madison Avenue, New York, New York 10017.
Baseball Digest (1977), M $1. Century Publishing Company, Box 5031, Des Moines, Iowa 50340.
Baseball Guidebook (1977), special issue, $1.50. Maco Publishing Company, 380 Madison Avenue, New York, New York 10017.

• Basketball

TRADE BOOKS

Antonacci, Robert, and Jene Barr. *Basketball for Young Champions*. Englewood Cliffs, New Jersey: McGraw-Hill, 1960. (Gr. 4-7)
Batson, Larry. *Bill Walton*. Mankato, Minnesota: Creative Education, 1974. (Gr. 3-6)
Barnes, M.J. *Girls' Basketball*. New York: Sterling House, 1970. (Gr. 7-12)
Berger, Phil. *Heroes of Pro Ball*. New York: Random House, 1973. (Gr. 5-9)
Bradley, Bill. *Life on the Run*. New York: New York Times Book Company, 1976. (Gr. 9-12)
Carson, John F. *The Coach Nobody Liked*. New York: Dell, 1971. (Gr. 9-12)
Carson, John F. *Court Clown*. New York: Farrar, Straus, and Giroux, 1963. (Gr. 7-12)
Christopher, Mathew. *Johnny Long Legs*. Boston: Little, Brown, 1970. (Gr. 4-6)
Cousy, Robert. *The Last Loud Roar*. Englewood Cliffs New Jersey: Prentice-Hall, 1964. (Gr. 8-12)

Garstang, J.G. *Basketball the Modern Way*. New York: Sterling House, 1967. (Gr. 7-12)
Harris, Merv. *On the Court with the Superstars of the NBA*. New York: Viking, 1973. (Gr. 7-12)
Hollander, Zander. *The Modern Encyclopedia of Basketball*. New York: Four Winds Press, 1973. (Gr. 7-12)
Hollander, Zander. *Basketball's Greatest Games*. Englewood Cliffs, New Jersey: Prentice-Hall, 1971. (Gr. 7-12)
Jackson, Phil. *Maverick: More than a Game*. New York: Playboy Press, 1976. (Gr. 8-12)
Klein, Dave. *Rookie: The World of the NBA*. New York: Grosset and Dunlap, 1973. (Gr. 7-9)
Knosher, Harley. *Basic Basketball Strategy*. New York: Doubleday, 1972. (Gr. 7-12)
Lord, Beman. *Guards for Matt*. New York: Henry Z. Walck, 1961. (Gr. 3-5)
Madden, Betsy. *The All-American Coeds*. Criterion Books, 1971. (Gr. 8+)
Masin, Herman L. *How to Star in Basketball*. New York: Four Winds Press, 1966. (Gr. 7-12)
Miers, Earl. *Basketball*. New York: Grosset and Dunlap, 1974.
Miles, Betty. *All It Takes Is Practice*. New York: Dell, 1979. (Gr. 5-9)
Padive, Sandy. *Basketball's Hall of Fame*. Englewood Cliffs, New Jersey: Prentice-Hall, 1970. (Gr. 9-12)
Pepe, Phil. *Greatest Stars of NBA*. Englewood Cliffs, New Jersey: Prentice-Hall, 1970. (Gr. 7-12)
Rupp, Adolph F. *Championship Basketball for Player, Coach, and Fan*. Englewood Cliffs, New Jersey: Prentice-Hall, 1957. (Gr. 9+)
Sullivan, George. *Winning Basketball*. New York: David McKay, 1976. (Gr. 7-12)
Walden, Amelia E. *Basketball Girl of the Year*. New York: McGraw-Hill, 1970. (Gr. 7+)
Weber, Bruce. *All Pro Basketball Stars*. Starline School Book Services, 1976. (Gr. 7-12)
Wooden, John. *They Call Me Coach*. Waco, Texas: Word Books, 1972. (Gr. 8-12)

MAGAZINES

Basketball Digest (1973), 6 times/year, $6/year. Century Publishing, 1020 Church Street, Evanston, Illinois.
Basketball Guide, $2/year. American Alliance for Health, Physical Education and Recreation, 1201 Sixteenth Street, NW, Washington, D.C.
Basketball Handout. International Association of Approved Basketball Officials, 1620 Dual Highway East, Hagerstown, Maryland.
Basketball News (1969), M $5. Box 1894, Coral Gables, Florida 83134.
Basketball Weekly. Football News Company, Box 2043, Detroit, Michigan.

• Football

TRADE BOOKS

Bateson, Larry. *Alan Page*. Mankato, Minnesota: Creative Education, 1974. (Gr. 3-6)

Blinn, William. *Brian's Song*. New York: Bantam, 1980. (Gr. 6)

Brancato, Robin F. *Winning*. New York: Bantam, 1980. (Gr. 6)

Cassady, Steve. *The Oakland Raiders: The Good Guys*. Novato, California: Squarebooks, 1975. (Gr. 10-12)

Christopher, Matt. *Football Fugitive*. Boston: Little, Brown, 1976. (Gr. 4-7)

Gelman, Steve. *Football Fury*. New York: Doubleday, 1976. (Gr. 7-9)

Gutman, Bill. *Football Superstars of the 70s*. New York: Simon and Schuster, 1975. (Gr. 7+)

Hutto, Nelson. *Breakaway Back*. New York: Harper and Row, 1963. (Gr. 7-12)

Hutto, Nelson. *Goal Line Bomber*. New York: Harper and Row, 1964. (Gr. 7-12)

Kramer, Jerry. *Lombardi: Winning Is the Only Thing*. New York: Maddick Manuscripts, 1970. (Gr. 7+)

Lord, Beman. *Quarterback's Aim*. New York: Henry Z. Walck, 1960. (Gr. 3-5)

Morris, Jeannie. *Brian Piccolo: A Short Season*. New York: Dell, 1979. (Gr. 6-9)

Peck, Richard E. *Something for Joey*. New York: Bantam, 1980. (Gr. 6-9)

Rainbolt, Richard. *Football's Rugged Running Backs*. Minneapolis, Minnesota: Lerner, 1975. (Gr. 5-11)

Renick, Marion. *The Famous Forward Pass Pair*. New York: Scribners, 1977. (Gr. 6-9)

Rockne, Knute K. *Coaching the Way of the Winner*. Old Greenwich, Connecticut: Devin-Adair, 1925. (Gr. 8-12)

Sayers, Gale, with Al Silverman. *I Am Third*. New York: Bantam, 1980. (Gr. 7-9)

Scholz, Jackson. *Football Rebels*. New York: William Morrow, 1960. (Gr. 7+)

Simpson, O.J. *The Buffalo Bill's O.J. Simpson: Rushing Champion*. Englewood Cliffs, New Jersey: Prentice-Hall, 1974. (Gr. 9-12)

Wayne, Bennett. *Football Replay: Great Games, Coaches, Players*. Illinois, 1973. (Gr. 5-12)

MAGAZINES

Football Digest, $6/year. Century Publishing Company, 1020 Church Street, Evanston, Illinois 60201.

Game Plan, $2.75. Game Plan Magazine, 2015 Main Street, North Syracuse, New York 13212.

Pro and College Football Today, $1. Phi Publishing Company, 540 Madison Avenue, New York, New York 10022.

Pro Football, $1.25. Larry Levine Associates, 380 Madison Avenue, New York, New York 10017.

Pro Quarterback, $1.95. 420 Lexington Avenue, New York, New York 10017.

• Gymnastics

TRADE BOOKS

Bedard, Irvin. *Gymnastics for Boys*. New York: Follett, 1962. (Gr. 6+)

Claus, Marshall. *Better Gymnastics for Boys*. New York: Dodd, Mead, 1970. (Gr. 5+)

Drehman, Vera L. *Head Over Heels: Gymnastics for Children*. New York: Harper and Row, 1967. (Gr. 3+)

Jacobs, Linda. *Cathy Rigby on the Beam*. St. Paul, Minnesota: EMC Corporation, 1975. (Gr. 3-6)

Jacobs, Linda. *Joan Moore Rice: The Olympic Dream*. St. Paul, Minnesota: EMC Corporation, 1975. (Gr. 5-8)

Kaneko, Akitomo. *Olympic Gymnastics*. New York: Sterling, 1976. (Gr. 9+)

Loken, Newton C. *Gymnastics*. New York: Sterling, 1966. (Gr. 7-9)

Loken, Newton C. *Complete Book of Gymnastics*. Englewood Cliffs, New Jersey: Prentice-Hall, 1959. (Gr. 7+)

Loken, Newton C. *Gymnastics*. New York: Sterling, 1970. (Gr. 7+)

Miklowitz, Gloria D. *Nadia Comaneci*. New York: Grosset and Dunlap, 1977. (Gr. 3+)

Musher, Frank F. *A Guide to Gymnastics*. New York: Macmillan, 1968. (Gr. 9+)

Ryan, Frank. *Gymnastics for Girls*. New York: Viking, 1976. (Gr. 7+)

Wachtel, Erna, and Newton C. Loken. *Girl's Gymnastics*. New York: Sterling, 1969. (Gr. 7-9)

MAGAZINE ARTICLES

"Backward Gymnastics: Making Equipment," *Sunset*, 158 (May 1977), 110-111.

"Balance Beam from 2 x 4s," E.M. Rogers, *Popular Mechanics*, 145 (April 1976), 18.

"Bunch of New Gym Dandies: U.S. Olympic Trials," H. Weiskopf, *Sports Illustrated*, July 12, 1976, 45-46.

"Dynamite Flips for Gymnastics," *Dynamite*, No. 22, 26-27.

"Flip in Time," C. Hill, *Seventeen*, 33 (August 1974), 124.

"Great Leap Backward: Nadia Comaneci in American Cup Competition," A. Verschoth, *Sports Illustrated*, 44 (April 12, 1976), 94.

"Gymnastics Fever," A. Verschoth, *Horizon*, 19 (May 1977), 62-69.

"Gymnastics: Rough and Tumble, Olympic Preview," *Time*, 108 (July 19, 1976), 60-61.

"Mixing Satin and Steel: Photographs of Woman Gymnasts," H. Kluetmeier, *Sports Illustrated*, 40 (June 10, 1974), 26-27.

• Tennis

TRADE BOOKS

Bradlee, Dick. *Instant Tennis*. Old Greenwich, Connecticut: Devin-Adair, 1962. (Gr. 7+)

87

Burchard, Marshall. *Sports Hero: Jimmy Connors*. New York: Putnam, 1976. (Gr. 3-7)
Burchard, Peter. *Chris Evert: The Young Champion*. New York: Putnam, 1976. (Gr. 4-8)
Deegan, Paul J. *The Basic Strokes*. Mankato, Minnesota: Creative Education, 1976. (Gr. 3-9)
Deegan, Paul J. *Serving and Returning Service*. Mankato, Minnesota: Creative Education, 1976. (Gr. 3-9)
Deegan, Paul J. *Volleying and Lobs*. Mankato, Minnesota: Creative Education, 1976. (Gr. 3-9)
Duroska, Lud. *Tennis for Beginners*. New York: Grosset and Dunlap. (Gr. 3-9)
Dypwick, Otis J., and Helen H. Jacobs. *Golf, Swimming, and Tennis*. Mankato, Minnesota: Creative Education, 1962. (Gr. 4+)
Gibson, Althea. *I Always Wanted to Be Somebody*. New York: Harper and Row, 1958. (Gr. 6+)
Gilbert, Nan. *Champions Don't Cry*. New York: Harper and Row, 1960. (Gr. 5-7)
Higdon, Hal. *Champions of the Tennis Court*. Englewood Cliffs, New Jersey: Prentice-Hall, 1971. (Gr. 4-7)
Hopman, Harry. *Better Tennis*. New Rochelle, New York: Sportshelf and Soccer Associates, 1976. (Gr. 7+)
Hopman, Harry. *Better Tennis for Boys and Girls*. New York: Dodd, Mead, 1972. (Gr. 7+)
Jacobs, Helen Hull. *The Tennis Machine*. New York: Charles Scribner's Sons, 1972. (Gr. 6+)
Metzler, Paul. *Advanced Tennis*. New York: Sterling, 1972. (Gr. 5+)
Metzler, Paul. *Getting Started in Tennis*. New York: Sterling, 1972. (Gr. 7+)
Metzler, Paul. *Tennis Weaknesses and Remedies*. New York: Sterling, 1973. (Gr. 10+)
Ogan, Margaret, and George Ogan. *Smashing: Jimmy Connors*. Milwaukee, Wisconsin: Raintree, 1976. (Gr. 4+)
Okker, Tom. *Tennis in Pictures*. New York: Sterling, 1975. (Gr. 5+)
Riessen, Clare. *Tennis: A Basic Guide*. New York: Lothrop, Lee, and Shepard, 1969. (Gr. 7-12)
Scharff, Robert. *Tennis*. New York: Macmilian, 1968. (Gr. 7-12)

OTHER REFERENCES FOR BOOKS

Subject Guide to *Books in Print*, Volume 2. New York: R.R. Bowker Company, 1976.

• Track and Field

TRADE BOOKS

Antonacci, R.J. *Track and Field for Young Champions*. New York: McGraw-Hill, 1974. (Gr. 7-9)
Bannister, Roger. *The Four Minute Mile*. New York: Dodd, Mead, 1955. (Gr. 9-12)

Buchanan, William. *A Shining Season*. New York: Bantam, 1980. (Gr. 9+)
Bush, Jim. *Inside Track*. South Bend, Indiana: Regnery/Gateway, 1974. (Gr. 7-9)
Dunaway, J.O. *Sports Illustrated Track and Field: Running Events*. New York: Time Life, 1973. (Gr. 7+)
Bowerman, Bill, and Bobbie Moore. *Field Events*. Philadelphia: J.B. Lippincott, 1976. (Gr. 9+)
Clarke, Ron. *Ron Clarke Talks Track*. Los Altos, California: Track and Field News, 1970. (Gr. 9+)
Coombs, Charles. *Be a Winner in Track and Field*. New York: William Morrow, 1976. (Gr. 7-9)
Ecker, T. *Olympic Track and Field Techniques*. Englewood Cliffs, New Jersey: Prentice-Hall, 1974. (Gr. 7-9)
Ferstle, Jim. *Dave Wottle Story*. Mountain View, California: World Publications, 1973. (Gr. 7-9)
Foreman, K., and V. Husted. *Track and Field*. Dubuque, Iowa: Wm. C. Brown, 1966. (Gr. 7-9)
Foster, J. *Tale of the Ancient Marathoner*. Mountain View, California: World Publications, 1974. (Gr. 6-9)
Hanley, R. *Who's Who in Track and Field*. New Rochelle, New York: Arlington House, 1973. (Gr. 5+)
Jackson, Jesse. *Charley Start from Scratch*. New York: Dell, 1979. (Gr. 2-5)
Kaufman, Mervyn. *Jesse Owens*. New York: Thomas Y. Crowell, 1973. (Gr. 2-5)
Lavery, J., et al. *Track and Field for Coach and Athlete*. Englewood Cliffs, New Jersey: Prentice-Hall, 1970. (Gr. 9+)
Lee, Robert. *It's a Mile from Here to Glory*. Boston: Little, Brown, 1972. (Gr. 5+)
McClinton, Leon. *Cross-Country Runner*. New York: E.P. Dutton, 1974. (Gr. 6+)
Meyers, E., and R. Hacker. *Track and Field*. Mankato, Minnesota: Creative Education, 1962. (Gr. 4-6)
Nelson, C. *Track and Field: The Great Ones*. Los Altos, California: Track and Field News, 1970. (Gr. 5+)
Parker, J. *Frank Shorter Story*. Mountain View, California: World Publications, 1972. (Gr. 7-12)
Parker, R.S. *Getting Started in Track and Field*. Los Altos, California: Track and Field News, 1976. (Gr. 7-9)
Platt, Kim. *Run for Your Life*. New York: Dell, 1977. (Gr. 7-12)
Ryan, Frank. *Discus*. New York: Viking, 1973. (Gr. 7-9)
Schaap, D., and B. Beamon. *The Perfect Jump*. NAL, 1976. (Gr. 5+)
Sullivan, George. *Better Track and Field Events for Boys*. New York: Dodd, Mead, 1967. (Gr. 5-7)
Vinson, Kathryn. *Run with the Ring*. New York: Harcourt Brace Jovanovich, 1965. (Gr. 6+)

OTHER REFERENCES FOR TRADE BOOKS

Subject Guide to *Books in Print*, Volume 2. New York: R.R. Bowker, 1976.

MAGAZINES

Track and Field News, $8. Box 296, Los Altos, California. (Gr. 7+)

• Volleyball

TRADE BOOKS

Anthony, Don. *Success in Volleyball.* Levittown, New York: Transatlantic Arts, 1974. (Gr. 7-10)

Betucci, Robert (Ed.). *Championship Volleyball: By the Experts.* West Point, New York: Leisure Press, 1978. (Gr. 9-12)

Beutelstahl, Dieter. *Volleyball: Playing to Win.* New York: Arco, 1978. (Gr. 8-10)

Black, William B. *Better Volleyball.* New York: International Publications, 1978. (Gr. 7-12)

Dunkel, Courtney. *Volleyball.* New York: Grosset and Dunlap, 1977. (Gr. 7-12)

James, Dave. *Volleyball for Schools.* Levittown, New York: Transatlantic Arts, 1977. (Gr. 7-12)

Lyttle, Richard B. *Basic Volleyball Strategy.* New York: Doubleday, 1979.

Scates, Allen E. *Winning Volleyball.* Boston: Allyn and Bacon, 1976. (Gr. 7-12)

Trotter, B.J. *Volleyball for Girls and Women.* New York: John Wiley, 1965. (Gr. 7-12)

PAPERBACKS

Egstrom, Glen, and Frances Schaafsma. *Volleyball.* Dubuque, Iowa: Wm. C. Brown, 1972. (Gr. 7-12)

Nisle, Virginia M. *Coed Volleyball: The Now Game.* Dubuque, Iowa: Kendall/Hunt, 1977. (Gr. 7-12)

Odeneal, William T., and Harry E. Wilson. *Beginning Volleyball.* Belmont, California: Wadsworth, 1969. (Gr. 7-12)

Peck, Wilbur. *Volleyball.* New York: Macmillan, 1970. (Gr. 8-10)

Robinson, Bonnie, and Sports Illustrated Editors. *Sports Illustrated Volleyball.* Philadelphia: J.B. Lippincott, 1970. (Gr. 7-12)

Schaafsma, Frances, and Ann Heck. *Volleyball for Coaches and Teachers.* Dubuque, Iowa: Wm. C. Brown, 1971. (Gr. 9-12)

Thigpen, Janet. *Power Volleyball for Girls and Women.* Dubuque, Iowa: Wm. C. Brown, 1974. (Gr. 7-12)

• Soccer

TRADE BOOKS

Gault, Clare, and Frank Gault. *Pele: The King of Soccer.* New York: Dell, 1979. (Gr. 5+)

Lord, Beman. *Shrimp's Soccer Goal.* New York: Henry Z. Walck, 1970. (Gr. 2-5)

Messing, Shep, and David Hershy. *The Education of an American Soccer Player.* New York: Bantam, 1980. (Gr. 7+)

• Hockey

TRADE BOOKS

Lord, Beman. *Rough Ice.* New York: Henry Z. Walck, 1963. (Gr. 2-5)
Slote, Alfred. *The Hotshot.* New York: Dell, 1979. (Gr. 6+)

• Boxing

TRADE BOOKS

Lipsyte, Robert. *The Contender.* New York: Bantam, 1980. (Gr. 7+)
Lipsyte, Robert. *Free to Be Muhammad Ali.* New York: Bantam, 1980. (Gr. 8+)

• Swimming

TRADE BOOKS

Block, Marie Halum. *The Two Worlds of Damyan.* New York: Atheneum, 1966. (Gr. 3-6)

• Horseback Riding/Racing

TRADE BOOKS

Axthelm, Pete. *The Kid.* New York: Bantam, 1980. (Gr. 9+)
Farley, Walter. *Man O' War.* New York: Bantam, 1980. (Gr. 6+)
Forbes, Bryan. *International Velvet.* New York: Bantam, 1980. (Gr. 7+)